SHARP SERVICE MANUAL

No. S3333CDE500//

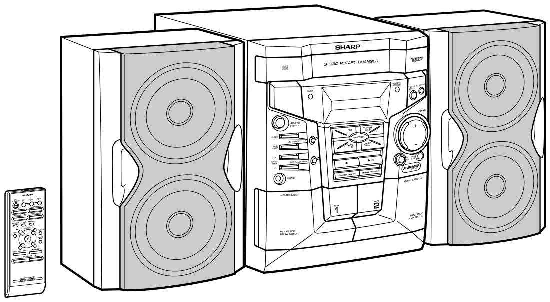


Illustration CD-E500/E55

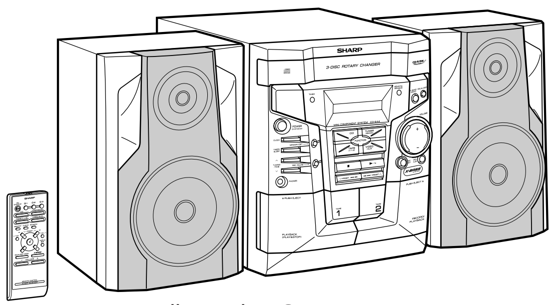


Illustration CD-E44

MINI COMPONENT SYSTEM

MODEL CD-E500

CD-E500 Mini Component System consisting of CD-E500 (main unit) and CP-E500 (speaker system).

MODEL CD-E55

CD-E55 Mini Component System consisting of CD-E55 (main unit) and CP-E55 (speaker system).

MODEL CD-E44

CD-E44 Mini Component System consisting of CD-E44 (main unit) and CP-E44 (speaker system).

COMPACT disc DIGITAL AUDIO　CD-R/RW Playable　3-DISC CD CHANGER with Play Exchange

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

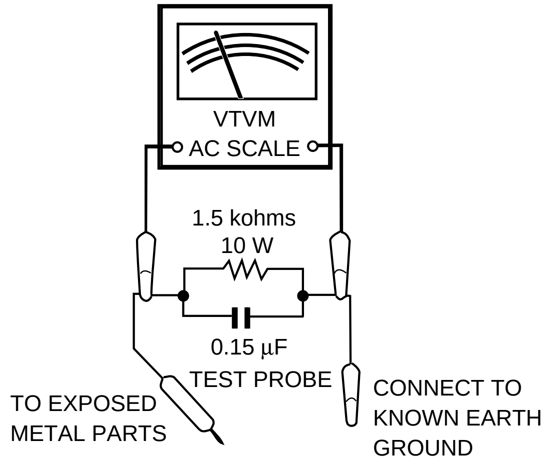
CONTENTS

IMPORTANT SERVICE NOTES (FOR U.S.A. ONLY)

BEFORE RETURNING THE AUDIO PRODUCT
(Fire & Shock Hazard)
Before returning the audio product to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the audio product.
2. Inspect all protective devices such as insulating materials, cabinet, terminal board, adjustment and compartment covers or shields, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

* Plug the AC line cord directly into a 120 volt AC outlet.
* Using two clip leads, connect a 1.5 kohm, 10 watt resistor paralleled by a 0.15 µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as conduit or electrical ground connected to earth ground.
* Use a VTVM or VOM with 1000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor (See diagram).
* Connect the resistor connection to all exposed metal parts having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.



All check must be repeated with the AC line cord plug connection reversed.
Any reading of 0.3 volt RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the audio product to the owner.

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

■ General

Power source	AC 120 V, 60 Hz
Power consumption	96 W
Dimensions	Width: 10-5/8" (270 mm) Height: 12" (305 mm) Depth: 13-1/2" (342 mm)
Weight	14.5 lbs. (6.6 kg)

■ Amplifier (Except for Canada)

Output power	50 watts minimum RMS per channel into 8 ohms from 100 Hz to 20 kHz, 10% total harmonic distortion
Output terminals	Speakers: 8 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms

■ Amplifier (For Canada)

Output power	RMS: 100 W (50 W + 50 W) (10 % T.H.D.)
Output terminals	Speakers: 8 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms

■ CD player

Type	3-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

Specifications for this model are subject to change without prior notice.

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 530 - 1,720 kHz

■ Cassette deck

Frequency response	125 - 8,000 Hz (normal tape)
Signal/noise ratio	50 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

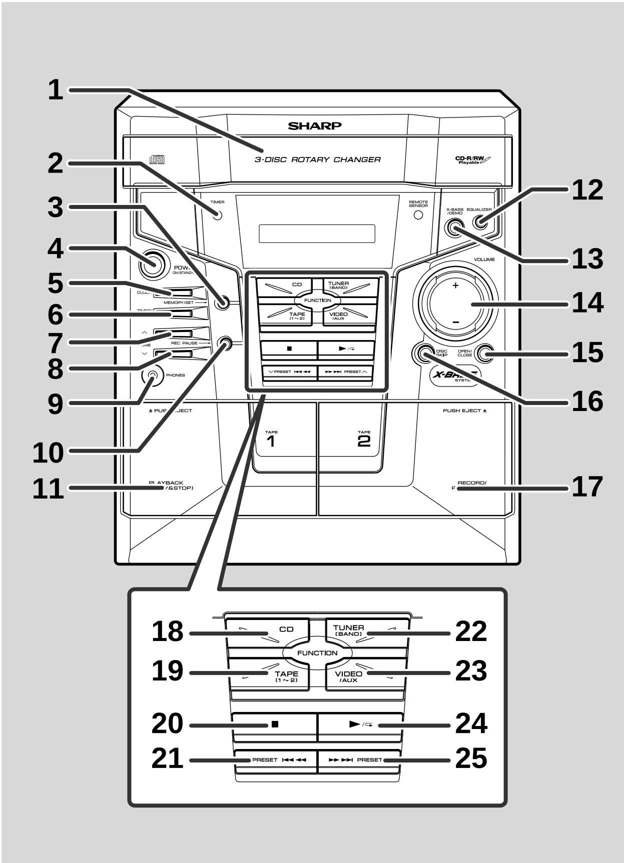
■ Speaker (CD-E500/E55)

Type	Twin-drive speaker system 4" (10 cm) woofer × 2
Maximum input power	100 W
Rated input power	50 W
Impedance	8 ohms
Dimensions	Width: 7-7/8" (200 mm) Height: 12" (305 mm) Depth: 7-1/16" (180 mm)
Weight	5.7 lbs. (2.6 kg)/each

■ Speaker (CD-E44)

Type	2-way type speaker system 2" (5 cm) tweeter 5" (13 cm) woofer
Maximum input power	100 W
Rated input power	50 W
Impedance	8 ohms
Dimensions	Width: 7-7/8" (200 mm) Height: 12" (305 mm) Depth: 7-1/16" (180 mm)
Weight	7.0 lbs. (3.2 kg)/each

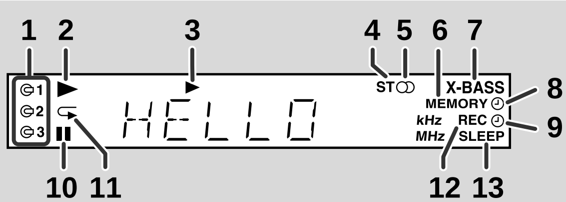
NAMES OF PARTS



■ Front panel

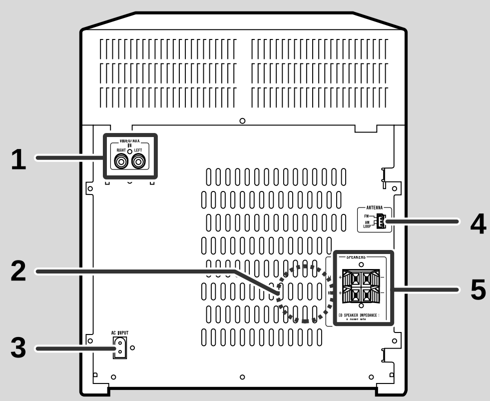
1. Disc Tray
2. Timer Set Indicator
3. Memory/Set Button
4. Power On/Stand-by Button
5. Clock Button
6. Timer/Sleep Button
7. Tuning and Time Up Button
8. Tuning and Time Down Button
9. Headphone Jack
10. Tape 2 Record Pause Button
11. Tape 1 Cassette Compartment
12. Equalizer Mode Select Button
13. Extra Bass/Demo Mode Button
14. Volume Up and Down Buttons
15. Disc Tray Open/Close Button
16. Disc Skip Button
17. Tape 2 Cassette Compartment
18. CD Button
19. Tape (1 ↔ 2) Button
20. CD or Tape Stop Button
21. CD Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button
22. Tuner (Band) Button
23. Video/Auxiliary Button
24. CD Play or Repeat, Tape Play Button
25. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button

CD-E500/E55



■ Display

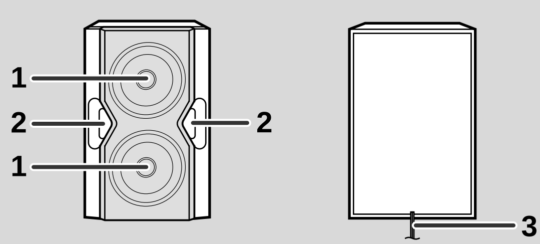
1. Disc Number Indicators
2. CD Play Indicator
3. Tape Play Indicator
4. FM Stereo Mode Indicator
5. FM Stereo Receiving Indicator
6. Memory Indicator
7. Extra Bass Indicator
8. Timer Recording Indicator
9. Timer Play Indicator
10. CD Pause Indicator
11. CD Repeat Play Indicator
12. Tape Record Indicator
13. Sleep Indicator



■ Rear panel

1. Video/Auxiliary (Audio Signal) Input Jacks
2. Cooling Fan
3. AC Power Input Jack
4. FM/AM Loop Antenna Jack
5. Speaker Terminals

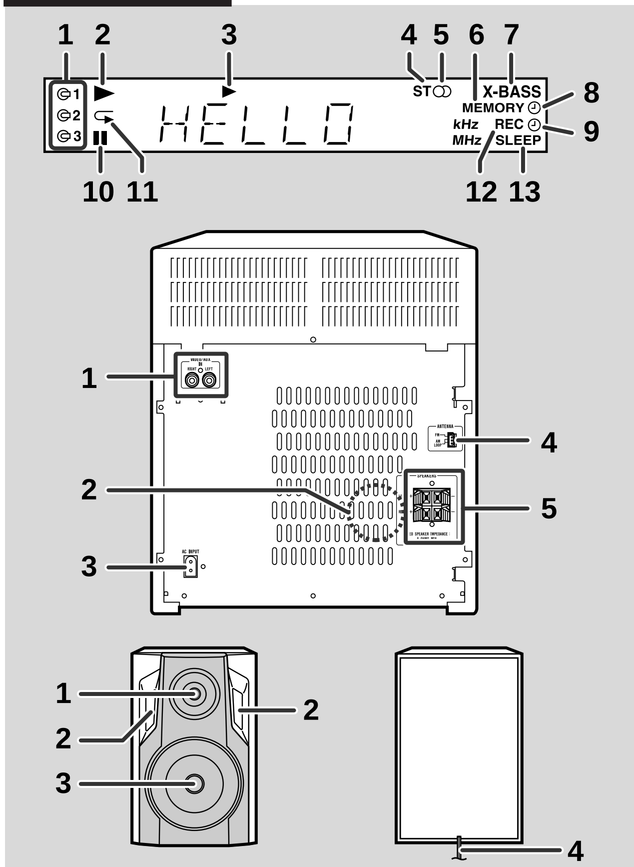
Note:
This product is equipped with a cooling fan inside, which begins to run at a specified volume level for better heat radiation.



■ Speaker system

1. Woofers
2. Bass Reflex Ducts
3. Speaker Wire

CD-E44



■ Display

1. **Disc Number Indicators**
2. **CD Play Indicator**
3. **Tape Play Indicator**
4. **FM Stereo Mode Indicator**
5. **FM Stereo Receiving Indicator**
6. **Memory Indicator**
7. **Extra Bass Indicator**
8. **Timer Recording Indicator**
9. **Timer Play Indicator**
10. **CD Pause Indicator**
11. **CD Repeat Play Indicator**
12. **Tape Record Indicator**
13. **Sleep Indicator**

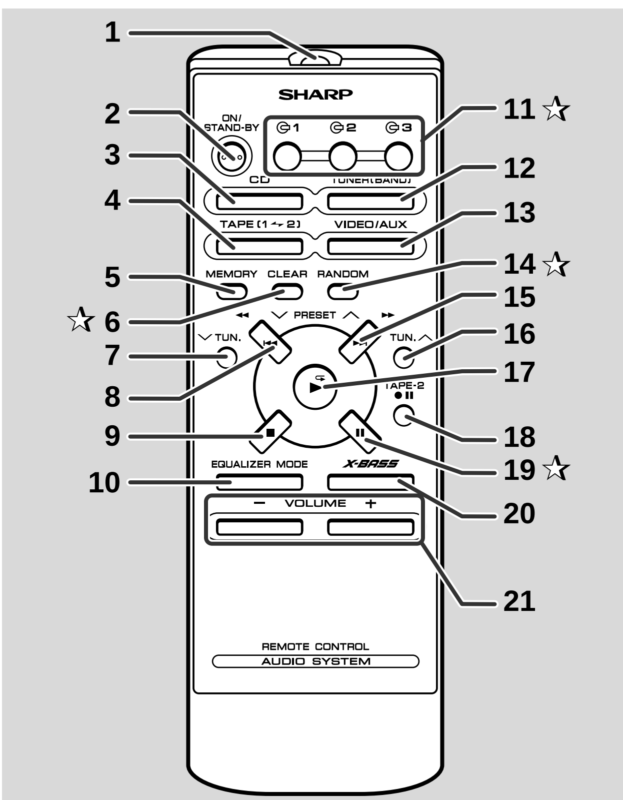
■ Rear panel

1. **Video/Auxiliary (Audio Signal) Input Jacks**
2. **Cooling Fan**
3. **AC Power Input Jack**
4. **FM/AM Loop Antenna Jack**
5. **Speaker Terminals**

Note:
This product is equipped with a cooling fan inside, which begins to run at a specified volume level for better heat radiation.

■ Speaker system

1. **Tweeter**
2. **Bass Reflex Ducts**
3. **Woofer**
4. **Speaker Wire**



■ Remote control

1. Remote Control Transmitter
2. Power On/Stand-by Button
3. CD Button
4. Tape (1 ↔ 2) Button
5. Memory Button
6. **Program Clear Button**
7. Tuning and Time Down Button
8. CD Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button
9. CD or Tape Stop Button
10. Equalizer Mode Select Button
11. **Disc Number Select Buttons**
12. Tuner (Band) Button
13. Video/Auxiliary Button
14. **CD Random Button**
15. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button
16. Tuning and Time Up Button
17. CD Play or Repeat, Tape Play Button
18. Tape 2 Record Pause Button
19. **CD Pause Button**
20. Extra Bass Button
21. Volume Up and Down Buttons

Buttons with "☆" mark in the illustration or highlighted in bold on the right can be operated on the remote control only.

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw .... (A1) x5	5-1
2	Side Panel (Left/Right)	1. Screw .... (B1) x8	5-1
3	CD Player Unit	1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close. .... (Note 1) 2. CD Tray Cover .... (C1) x1 3. Hook .... (C2) x2 4. Socket .... (C3) x1 5. Socket .... (C4) x2	5-2 6-1
4	Rear Panel	1. Screw .... (D1) x8	5-2
5	Main PWB	1. Screw .... (E1) x3 2. Screw .... (E2) x2 3. Socket .... (E3) x9 4. Socket .... (E4) x2	5-2 6-1 6-2
6	Front Panel	1. Screw .... (F1) x3 2. Hook .... (F2) x2	6-1
7	Display PWB	1. Screw .... (G1) x13	6-2
8	Tape Mechanism	1. Open the cassette holder. 2. Screw...................... (H1) x8	6-2
9	Headphones PWB	1. Screw .... (J1) x1	6-2
10	CD Servo PWB (Note 2)	1. Screw .... (K1) x4 2. Socket .... (K2) x2 3. Solder .... (K3) x2	6-3
11	Turntable	1. Screw .... (L1) x1 2. Spacer .... (L2) x1	6-4
12	Loading Tray	1. Push forward the loading tray. 2. Inserting the flat head into the hole, push in the direction indicated by the arrow. ... (M1) x2	6-4
13	CD Mechanism Block	1. Hook .... (N1) x2	6-5

Note 1: How to open the changer manually. (Fig. 5-3)

1. In this state, turn fully the loading Gear in the arrow direction through the hold on the loading tray bottom.
2. After that,push foward the loading tray.

Note 2:

1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electrostatic damage.

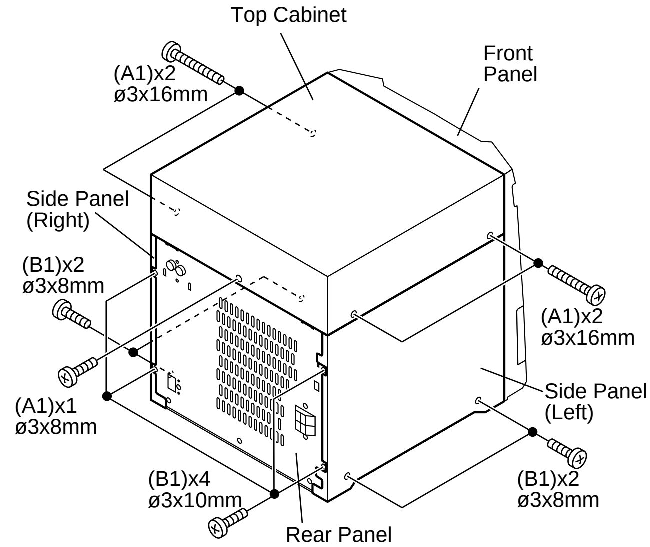


Figure 5-1

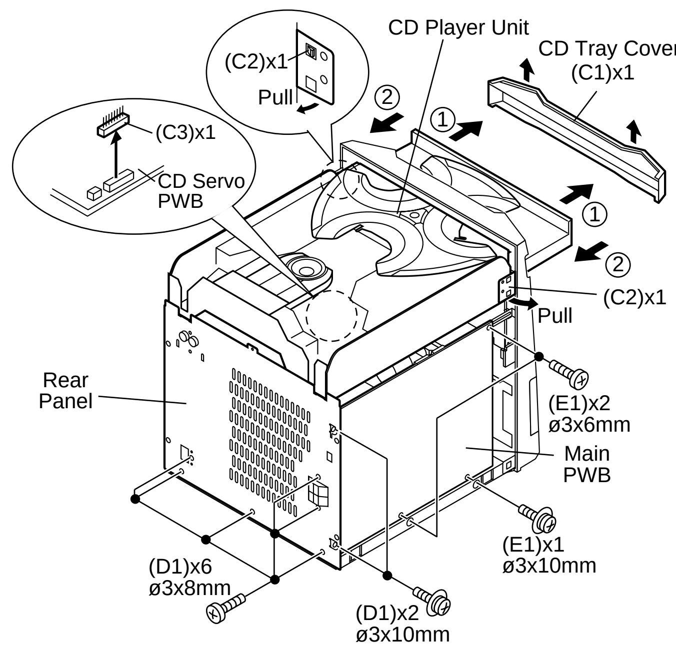


Figure 5-2

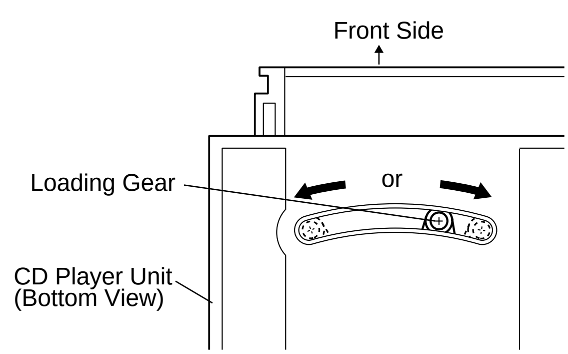


Figure 5-3

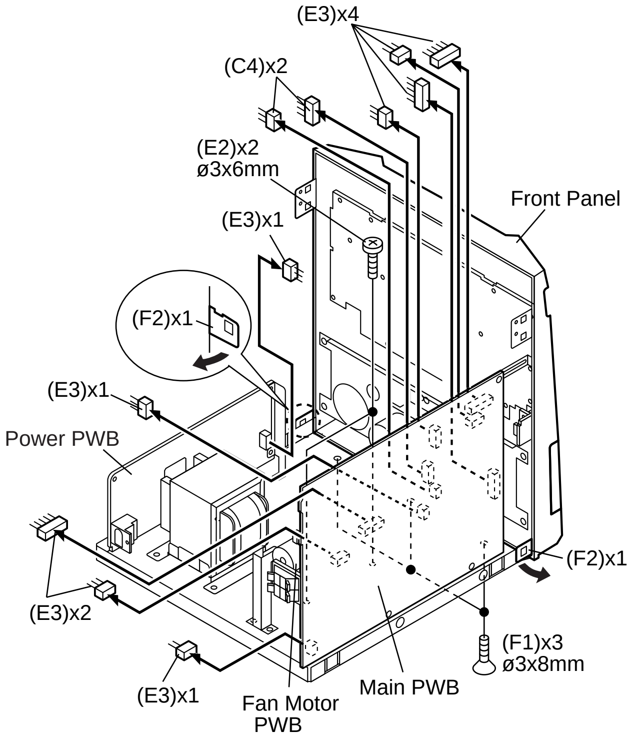


Figure 6-1

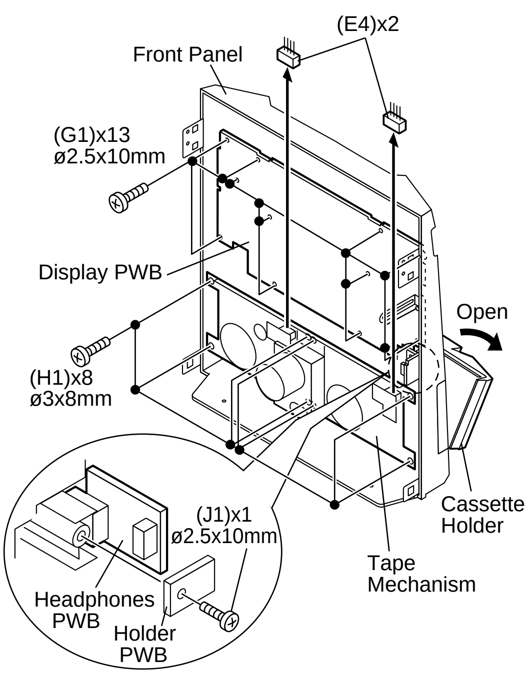


Figure 6-2

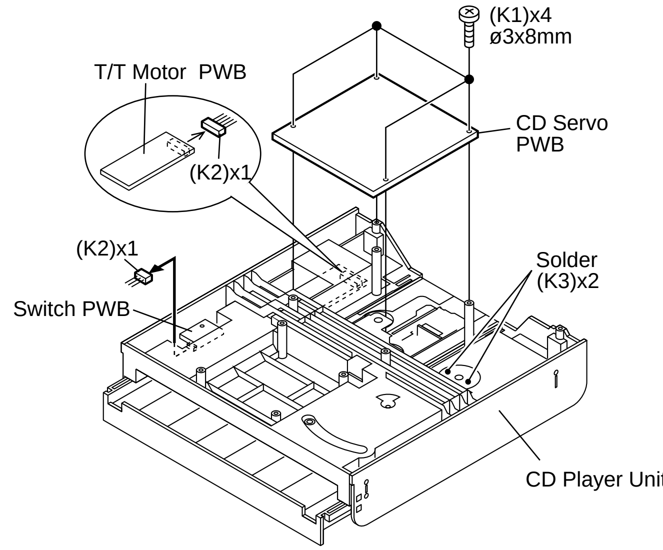


Figure 6-3

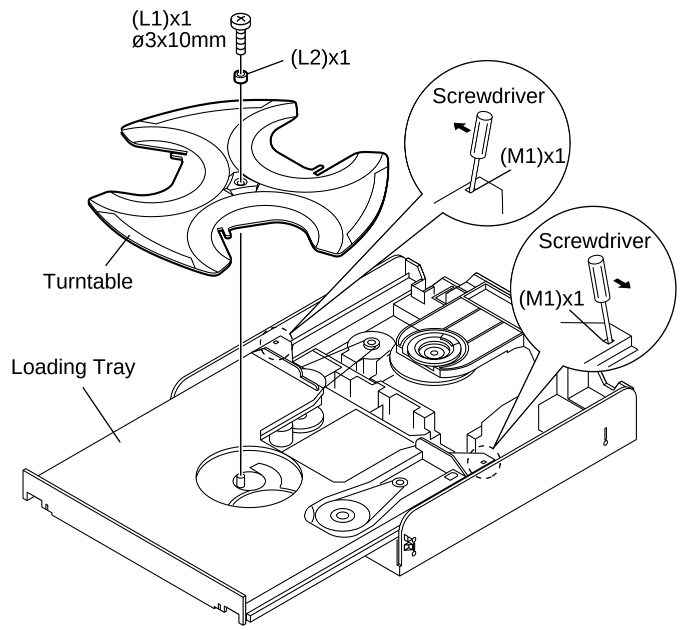


Figure 6-4

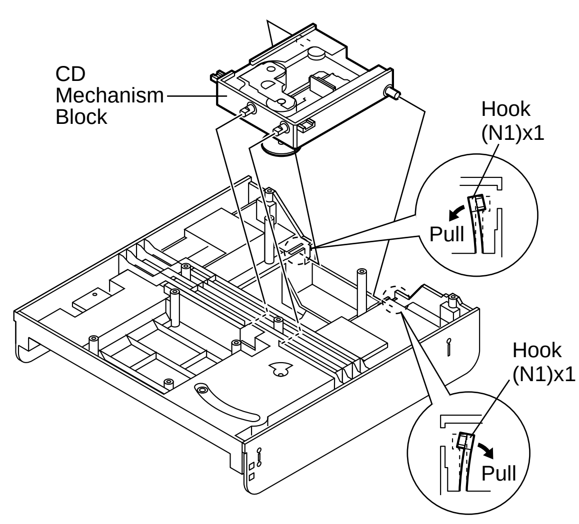


Figure 6-5

CP-E500/E55/E44

These speakers CP-E500,CP-E55,CP-E44 are available in assembles only and may not be disassembled.

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 6 and 8 of the disassembly method to remove the tape mechanism.

How to remove the record/playback and erase heads (TAPE 1) (See Fig. 7-1)

1. When you remove the screws (A1) x 2 pcs., the record/playback head can be removed.

How to remove the playback head (TAPE 2) (See Fig. 7-2)

1. When you remove the screws (B1) x 2 pcs., the erase head can be removed.
2. When you remove the screws (B2) x 2 pcs., the record/playback head can be removed.

Note:
After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

How to remove the pinch roller (TAPE 1,2) (See Fig. 7-3)

1. When you remove the screw (C1) x 1 pc., the pinch roller can be removed.

Note:
When installing the pinch roller, pay attention to the spring mounting position.

How to remove the motor (See Fig. 7-4)

1. Remove the belt.
2. Remove the screws (D1) x 4 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 3 pcs., to remove the motor.

How to remove the belt (TAPE 1) (See Fig. 7-5)

1. Remove the main belt (F1) x 1 pc., from the motor side.

How to remove the belt (TAPE 2) (See Fig. 7-5)

1. Remove the main belt (G1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (G2) x 1 pc.

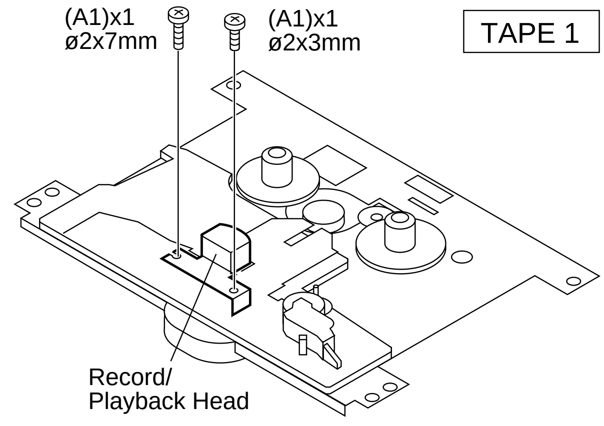


Figure 7-1

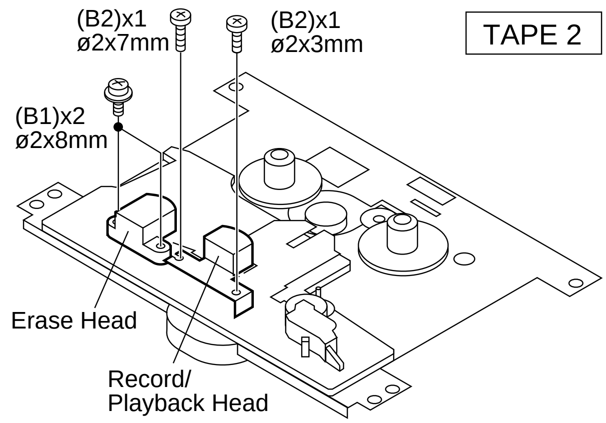


Figure 7-2

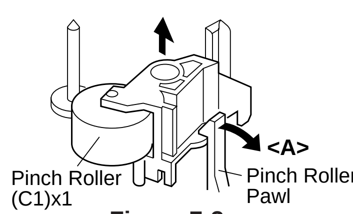


Figure 7-3

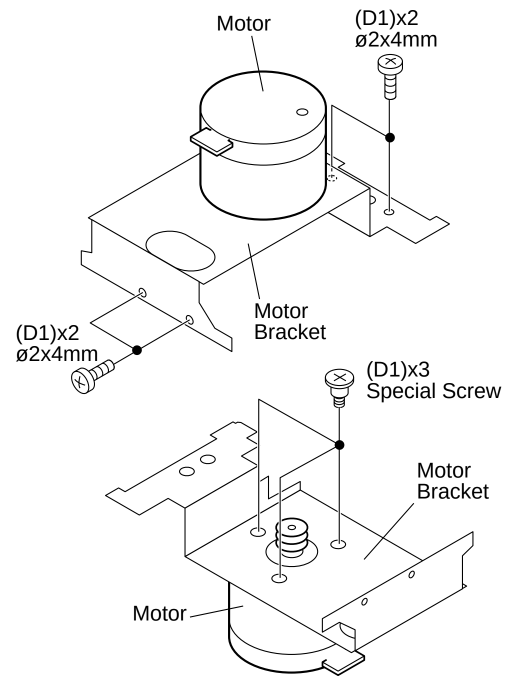


Figure 7-4

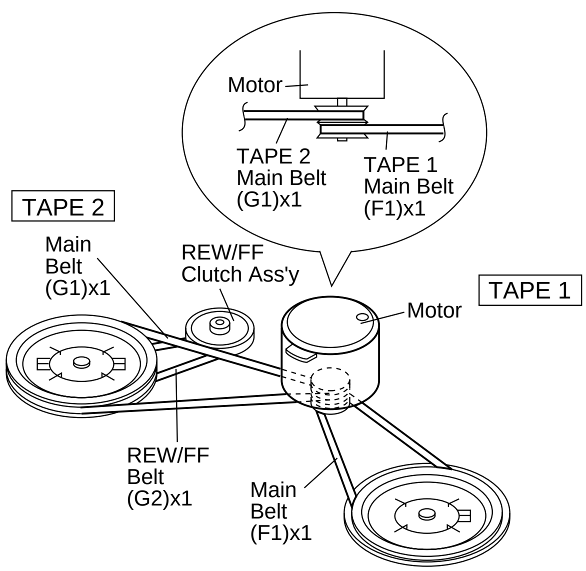


Figure 7-5

How to remove the flywheel (TAPE 1,2) (See Fig. 8-1.)

1. Remove the stop washer (H1) x 1 pc., with a small precision screwdriver to extract the flywheel from the capstan metal.

Note:
When the stop washer is deformed or damaged, replace it with a new one.

How to reinstall the parts

Install each part in the reverse order of the removal with care.

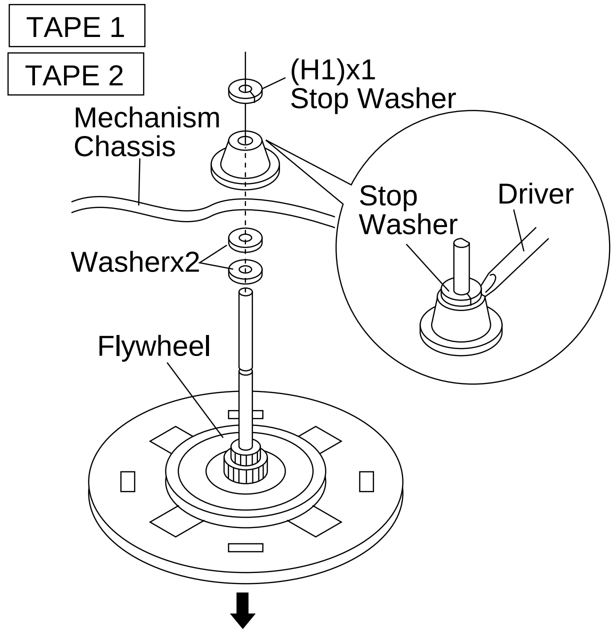


Figure 8-1

How to remove the tape mechanism PWB (TAPE 1,2) (See Fig. 8-2.)

1. Remove the screw (J1) x 1 pc., to remove the tape mechanism PWB.
2. Remove the screw (J2) x 1 pc.
3. Remove the solder joints (J3) x 2 pcs., to remove the tape mechanism PWB.

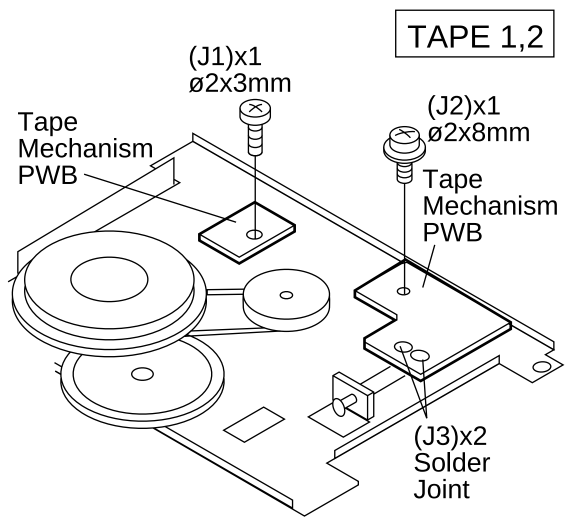


Figure 8-2

CD PLAYER SECTION

Perform steps 1, 2, 3, 10,11, and 12 of the disassembly method to remove the CD mechanism.

How to remove the T/T rotate motor (See Figs. 9-1)

1. Remove the screws (A1) x 2 pcs.
2. Remove the belt (A2) x 1 pc.
3. Remove the screws (A3) x 2 pcs., to remove the T/T rotate motor.

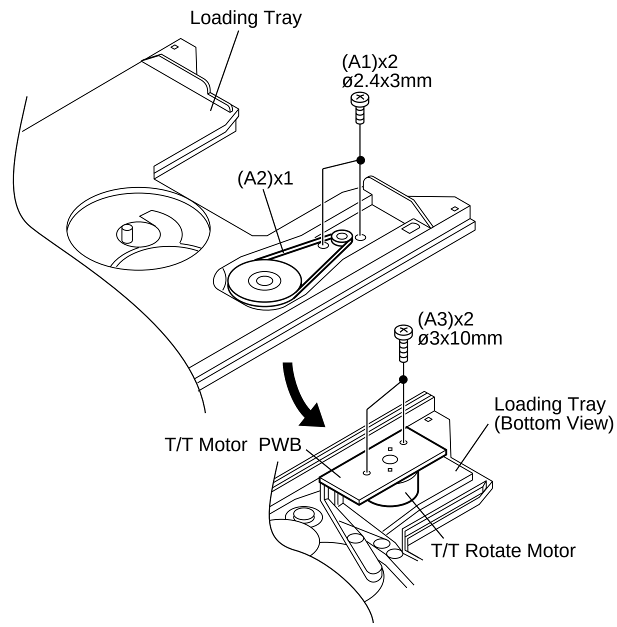


Figure 9-1

How to remove the up/down loading motor (See Figs. 9-2)

1. Remove the screws (B1) x 2 pcs.
2. Remove the belt (B2) x 1 pc.

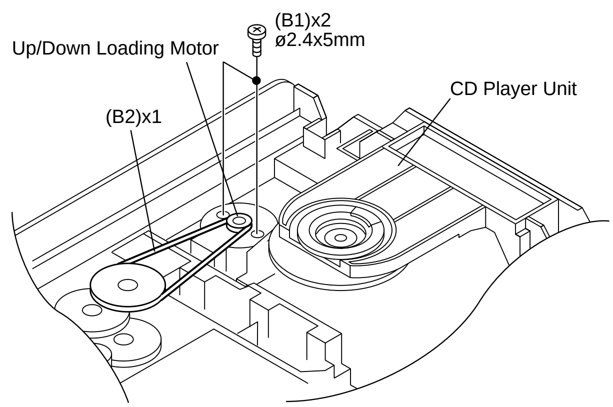


Figure 9-2

How to remove the CD mechanism unit (See Fig. 9-3)

Perform steps 1, 2, 3, 10and 13 of the disassembly method to remove the CD mechanism.

1. Remove the screws (C1) x 4 pcs., to remove the mechanism unit.

Note

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

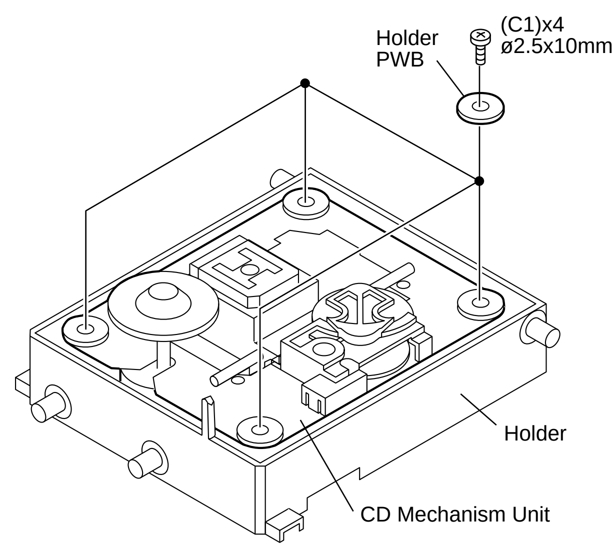


Figure 9-3

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: DM-300	Tape 1: Over 80 g Tape 2: Over 80 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: DM-300	10 to 20 g.cm	10 to 20 g.cm
Fast forward: DM-300	—	Over 50 g.cm
Rewind: DM-300	—	Over 50 g.cm

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Tape speed	TCC-119	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker Terminal (Load resistance: 8 ohms)

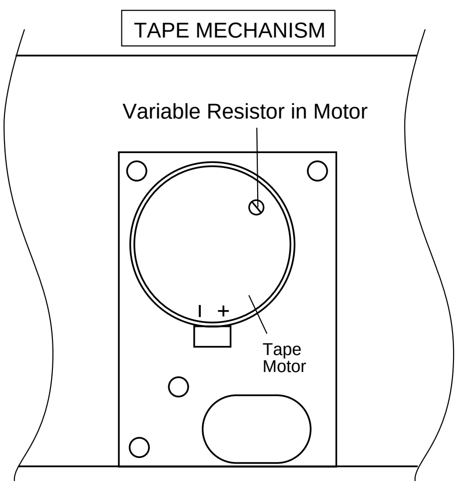


Figure 10-1

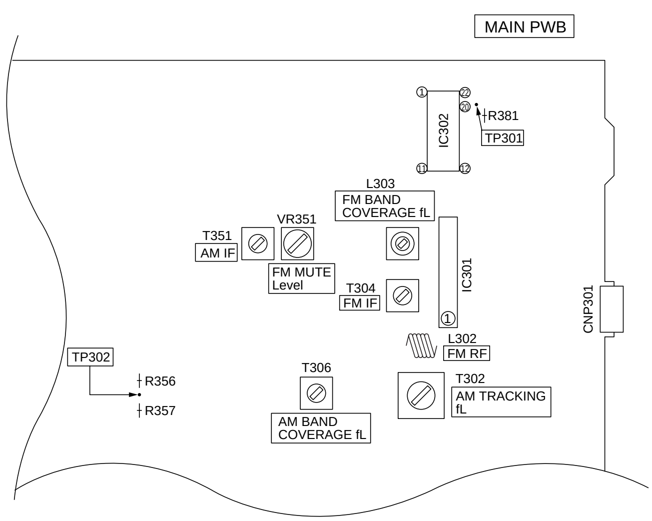


Figure 10-2 ADJUSTMENT POINTS

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,720 kHz	T351	*1
AM Band Coverage	—	530 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T302	*1

*1. Input: Antenna Output: TP302
*2. Input: Antenna Output: TP301

• FM RF

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
FM Band Coverage	—	87.50 MHz	L303 (fL): 1.3 V ± 0.1 V	*1
FM RF	98.00 MHz (10-30 dB)	98.00 MHz	L302	*2

*1. Input: Antenna Output: TP301
*2. Input: Antenna Output: Speaker Terminal

• FM IF

Signal generator: 10.7 MHz, FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
IF	10.7 MHz	98 MHz	T304 (Turn the core of trans-former T304 fully counter-clock wise)	*1

*1. Input: Antenna Output: TP301

• FM Mute Level (FM ST MODE)

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz (26 dBµV)	98.00 MHz	VR351*1	Input:CNP301 Output: Speaker Terminal

*1. Adjust so that an output signal appears.

TEST MODE

The test mode applied to this microcomputer has three modes, namely the ordinary test mode for adjustment or measurement, the aging test mode, and the self-diagnosis test mode for self-judgment in case of final product inspection.

1. Turning on the test mode

For obtaining each test mode, press the POWER ON/ STAND BY button, while keeping pressing the following two buttons in the ordinary stand-by mode (power off). In this case, the main unit buttons are valid. When turning the POWER on with remote control buttons, test modes are not obtained.

[Ordinary test mode]

1. CD Test Mode (TEST 1) ....
   CD + VOLUME UP
2. Tuner Test Mode (TEST 2) ....
   TUNER(BAND) + VOLUME UP
3. Electronic Volume Test Mode (TEST 3) ....
   TUNING DOWN + VOLUME UP
4. Timer Test Mode (TEST 4) ....
   TIMER/SLEEP + VOLUME DOWN
5. FL Test Mode (TEST 5) ....
   CLOCK + VOLUME DOWN
6. CD MECHANISM Aging Test Mode (TEST 8) ....
   MEMORY/SET + VOLUME DOWN

[Self-diagnosis Test Mode]

1. Button input diagnosis test mode (TEST06) ....
   TUNNIG UP + VOLUME UP

Processes are different depending on destinations at initial settings.

2. CD Test Mode (TEST 1)

In the CD test mode the operation of each step is possible even if the LID-SW is off. If focus cannot be taken in step 3 or any error is processed, it is impossible to proceed to the next step. During error processing, end the test mode by pressing the POWER ON/STAND BY button or return to the step 1 by pressing the CD STOP button. Any other operations are inhibited.

1. Step 1 Mode

When the CD test mode is obtained, the following display lights up. Then CD initialization operation flow proceeds up to CD STB off to wait for the following buttons to be pressed.

TEST - 1

One second after display lights up

↓

STEP - 1

Press the following buttons in this state to obtain the operations specified below.

"POWER ON/STAND BY" .. Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" .... After the pickup returns to the innermost periphery, it slides toward the outer periphery while this button is pressed.
"REW/REV" .... After the pickup returns to the innermost periphery, it slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET" ...... Shift to step 2
"STOP" .... Invalid
"VIDEO/AUX" CLV

2. Step 2 Mode

Press the "MEMORY/SET" button in this mode to transmit the laser lighting command LDON (8400) and turn on the laser. Any other operations are not performed in this case.

STEP - 2

Press the following buttons in this state to obtain the operations specified below.

"POWER ON/STAND BY" . Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" .... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET"...... Shift to step 3

3. Step 3 Mode

While the laser keeps lighting, CD initialization operation flow proceeds up to 'CLV servo ON' to wait for the following buttons to be pressed.(Focus servo turned on for focus search)
The focus search is repeated to take focus.

STEP - 3

Press the following buttons in this state to obtain the operations specified below.

"POWER ON/STAND BY" . Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" .... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET"...... If focus has been taken, shift to step 4 is executed. If not, acceptance is inhibited.

*If the focus is not received after it has been taken, the process returns to step 1.

4. Step 4 Mode

The CLV servo ON command (8600) is transmitted to wait for the following buttons to be pressed. (The disc is rotated for CLV lock.)

STEP-4

The time display always indicates "0:00".

Press the following buttons in this state to obtain the operations specified below.

"POWER ON/STAND BY" . Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV" .... The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"MEMORY/SET"...... Return to step 5

*If the focus is not received, the process returns to step 1.

5. Step 5 Mode

When the CD initialization operation flow is completed, the mute is turned off, and playback is started. Even if playback reaches the outermost periphery of disc, the operation does not stop. The LCD display indicates the playback passage time as in case of ordinary CD playback.

► 03 3:04

Press the following buttons in this state to obtain the operations specified below.

"POWER ON/STAND BY" .. Test mode and power turned off to shift to the ordinary standby mode.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is pressed.
"REW/REV"............. The pickup slides toward the inner periphery while this button is pressed. If PICKUP IN is on, input is invalid.
"PLAY" .... Invalid
"STOP"..................... Return to step 1

*If the focus is not received, the process returns to step 1.

Other cautions
• TOC IL is not available for this test mode.

3. Tuner Test Mode (TEST 2)

1. Outline of tuner (radio) test mode

The tuner test mode is intended to store the adjustment and measurement frequencies in the preset memory CH. When adjusting the tuner section in the production line, adjusting personnel are not required to set frequency.

2. Details of tuner test mode

Press the "TUNER(BAND)" and "VOLUME UP" buttons in POWER OFF state and turn on the power by the use of "POWER ON/STAND BY" button to preset and store frequency for adjustment and measurement of destination specified by the AREA terminal in the preset memory CH. However, Ordinary 1 and Ordinary 2 are stored in the destinations when the test mode is obtained.

(As for frequencies to be preset and stored for each destination, refer to item 3.)
The tuner test mode is started from preset No.1.
The operations of test mode are identical with the ordinary operations of TUNER function. FUNCTION switching is invalid.

It is necessary to discard the content of preset memory when the tuner test mode is ended; be sure to write "0000" or "1111" bits in the memory to be checked for judging memory error at initial setting and to initialize memory.

When the tuner test mode is obtained, the following display lights for one second.

TEST-2

• The TUNER TEST02 mode is obtained with >> + MEMORY/SET + POWER ON/STAND-BY. ->Turn off AC in the TEST02 mode to restore the initial state.

↓

Turn off POWER to protect the memory of TEST02 mode. Turn off POWER again to obtain the ordinary operation while the data is stored in the memory (besides TUNER).

↓

If AC OFF state is maintained in this state for about 1/2 day, start is executed in the initial state.

• To clear the whole memory, insert the AC cord, pressing MEMORY/SET + CD PLAY.

3. Preset frequencies for various destinations (random preset memory)

CH	BAND	FM
1		FM 87.5 MHz
2		FM108.0 MHz
3	FM	FM 98.0 MHz
4	STEREO	FM 90.0 MHz
5		FM106.0 MHz

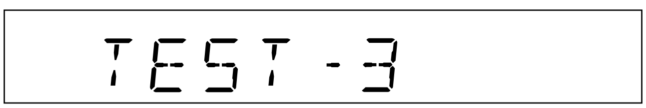
CH	BAND	AM
6		AM 530 kHz
7		AM1720 kHz
8	AM	AM 990 kHz
9		AM 600 kHz
10		AM1400 kHz

CH	BAND	FM
16-35		
36		FM106.0 MHz
37		FM 90.0 MHz
38	FM	FM 98.0 MHz
39	MONO	FM108.0 MHz
40		FM 87.5 MHz

• The slant line sections of the table store no memory.

4. Electronic volume Test Mode (TEST 3)

When this test mode is obtained, the following display lights for one second.



In this mode, volume is Volume -14 dB (STEP23), FLAT AND X-BASS ON, and start-up function to CD, respectively. The button operations in the test mode are the same as those of ordinary operation except volume UP/DOWN.

(1) The display is the same as that of ordinary operation except test mode setting.

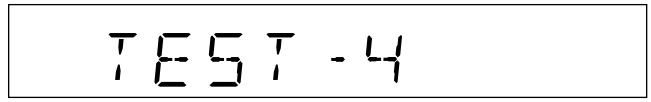
(2) Unlike the ordinary state, the volume is controlled with the volume UP/DOWN button in accordance with the following three steps.

Volume- ∞ (STEP 0) <-> Volume-14 dB (STEP 23) <-> Volume-0 (STEP 30)

(3) X-BASS is switched when button is pressed..

5. Timer test Mode (TEST 4)

When this test mode is obtained, the following display lights for one second.

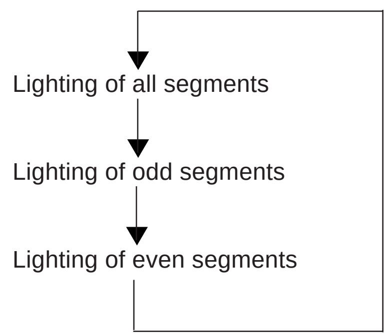


Set the current time and timer time according to the following procedure to reproduce the timer.

1. Set the current time to 1:00, the timer to ON time 1:05, the function to CD, and volume to STEP 12, respectively. One minute is counted as one second, and the timer is reproduced. The fade-in (when playback is started) is executed at a rate of one step for 1 sec. After completion of fade-in, the fade-out is executed at a rate of one step for 1 sec (WAIT 1 sec inserted).
After completion of fade-out, the power is turned off (after WAIT 1 sec), and the mode is shifted to the standby.
The display during operation is the same as that of ordinary timer operation.

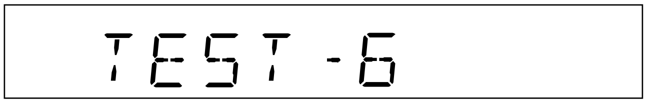
6. FL Test Mode (TEST 5)

When the FL test mode is obtained, all the FL segments are lighted. Then pressing the "PLAY" button switches display as below.



7. Button input diagnosis Test Mode (TEST 6)

When the test mode is obtained, the following is displayed. (STAND-BY AND DEMO OFF STATUS)



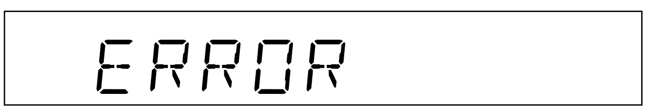
This test mode is intended to check whether all the main unit buttons can be detected. Accordingly, in this test mode, it is checked whether the "POWER ON/STAND BY" button was pressed after all the buttons shown below were pressed. If the result is OK, OK is displayed. If any one of keys was not pressed, an error is displayed. In both cases of OK termination or error termination, the mode is shifted to the standby mode if the "POWER ON/STAND BY" button is pressed subsequently.

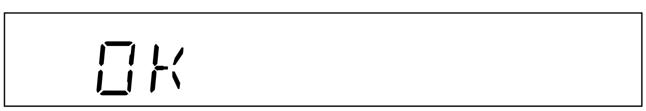
All models using this type of microcomputer are not always provided with the same buttons. Since the buttons used are different depending on models, types of buttons to be used are determined by whether SURROUND, and an electric lid are available at the initial setting by MODEL port.

The order of buttons to be pressed is not determined. Accordingly, it is checked whether all buttons have been pressed.

1. PU-IN buttons: REW/PRESET DOWN + CD STOP
   Since this model is provided with SURROUND (HAVE OR NOT), and electric CD lid, the following 10 buttons are detected as all buttons.
   PLAY, X-BASS/DEMO, FUNCTION, VOLUME UP/DOWN, MEMORY/SET, REW, FF, STOP, CD-OPEN/CLOSE

The OK/NG display of test result is as follows.

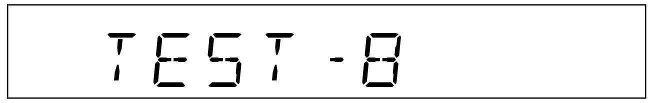




8. CD MECHANISM Aging Test Mode (TEST 8)

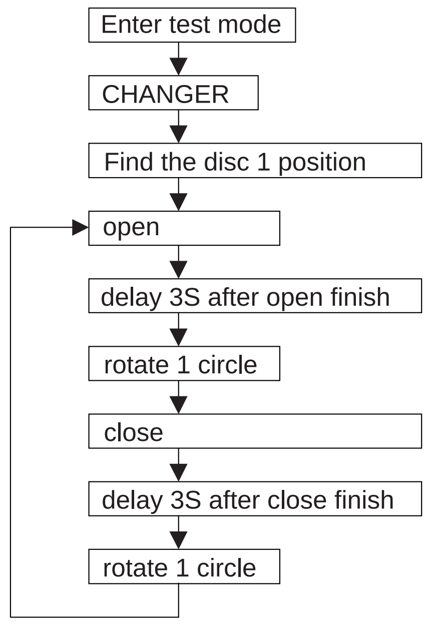
OPEN/CLOSE & 3 DISC CHANGER aging test.

DISPLAY:



FUNCTION:
Enter the TEST MODE 8, MCU control the 3 DISC CHANGER OPEN/CLOSE. After open finished, tray rotate 1 circle (360 degree). Then close, After close finished, tray rotate 1 circle (360 degree) again.

Request:
Every period include 4 operation. Below is TIMING:



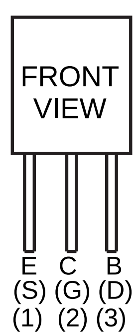
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     indicates AM
     indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” ([— — —]) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

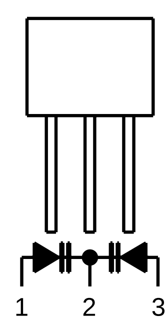
REF. NO	DESCRIPTION	POSITION
SW1	PICKUP IN	ON—OFF
SW401	DISC UP/DOWN	ON—OFF
SW402	OPEN/CLOSE	ON—OFF
SW403	DISC NO.	ON—OFF
SW404	DISC 1	ON—OFF
SW701	X-BASS/DEMO	ON—OFF
SW702	POWER ON/STAND-BY	ON—OFF
SW703	OPEN/CLOSE	ON—OFF
SW704	DISK SKIP	ON—OFF
SW705	VIDEO/AUX	ON—OFF
SW706	TAPE	ON—OFF
SW707	PRESET DOWN	ON—OFF
SW708	PLAY/REPEAT	ON—OFF
SW709	PRESET UP	ON—OFF
SW710	STOP	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW711	MEMORY/SET	ON—OFF
SW712	TUNING/TIME DOWN	ON—OFF
SW713	TUNING/TIME UP	ON—OFF
SW714	TIMER/SLEEP	ON—OFF
SW715	CLOCK	ON—OFF
SW719	EQUALIZER	ON—OFF
SW720	VOLUME UP	ON—OFF
SW721	VOLUME DOWN	ON—OFF
SW722	TUNER(BAND)	ON—OFF
SW723	CD	ON—OFF
SW724	REC/PAUSE	ON—OFF
SW801	TAPE2 INITIALIZE	ON—OFF
SW802	TAPE1 INITIALIZE	ON—OFF
SW803	TAPE2 REC	ON—OFF

TYPES OF TRANSISTOR AND LED



HSB562 C
HSC1609 GR
KRA102 M
KRA107 M
KRC102 M
KRC104 M
KRC107 M
KSA1015 GR
KSA1271 Y
KSC1815 GR
KSC3203 Y
SSC1674 C
2SC2001 K



KDV147B
SVC348S

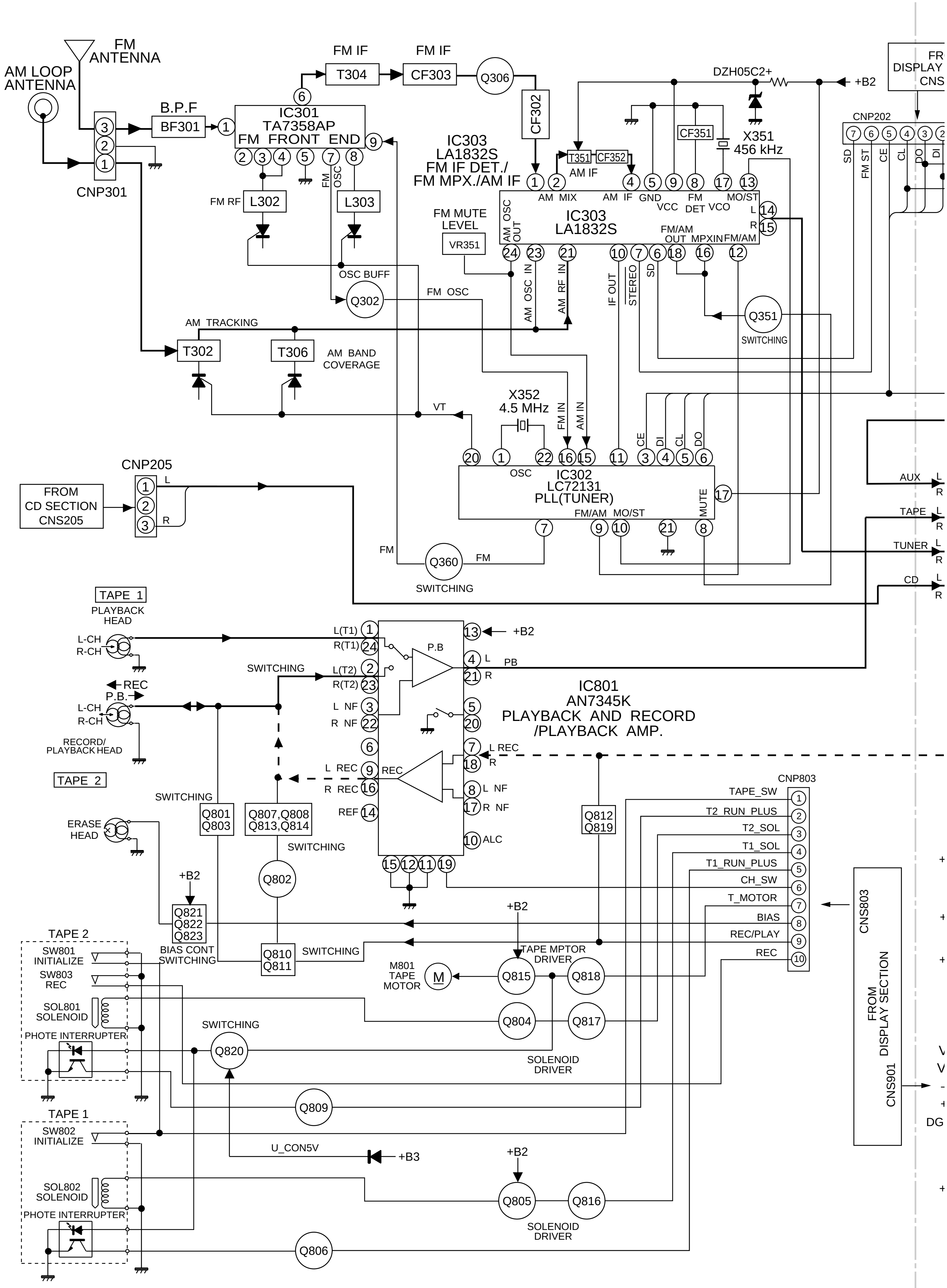


Figure 16 BLOCK DIAGRAM (1/4)

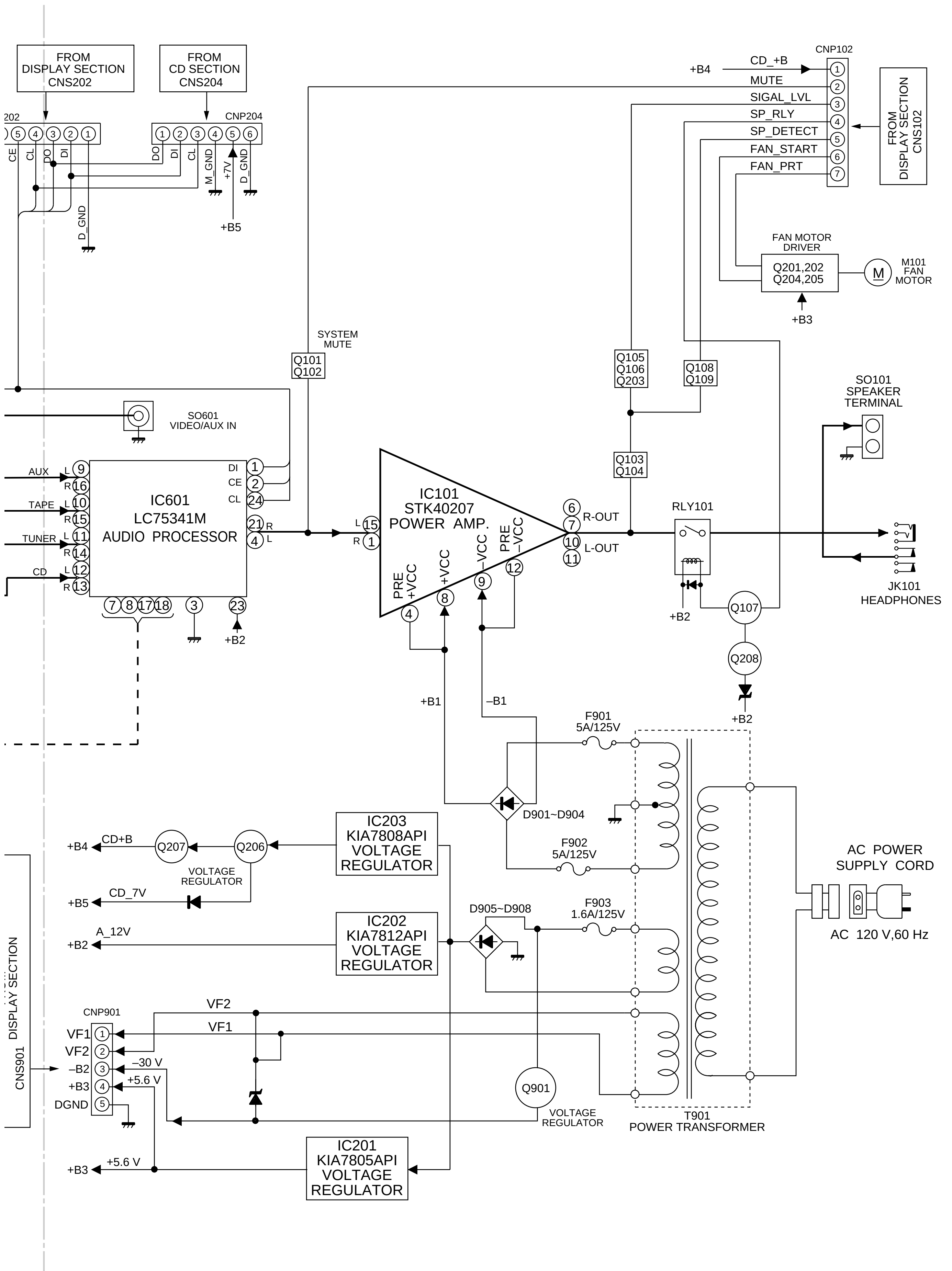


Figure 17 BLOCK DIAGRAM (2/4)

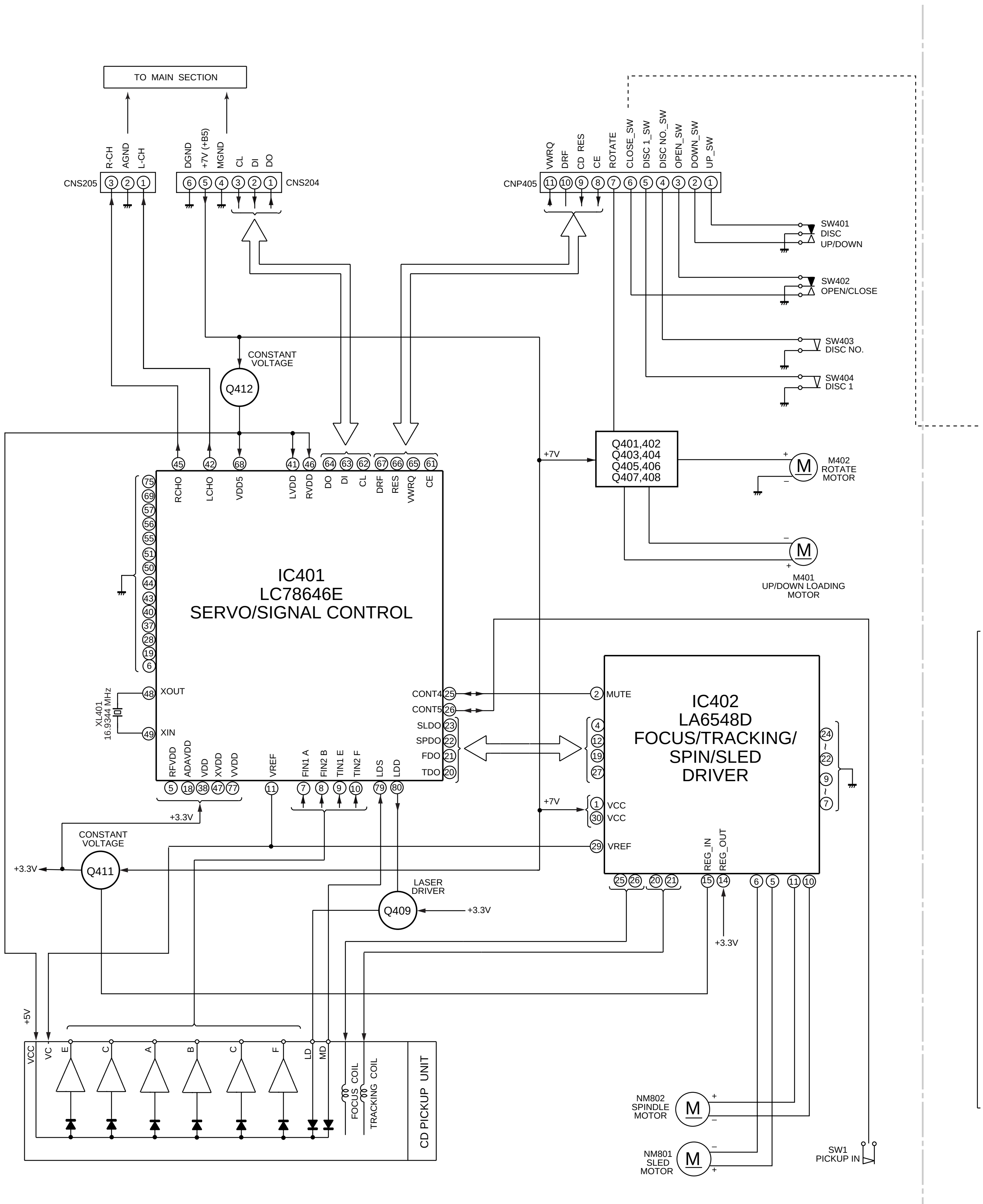


Figure 18 BLOCK DIAGRAM (3/4)

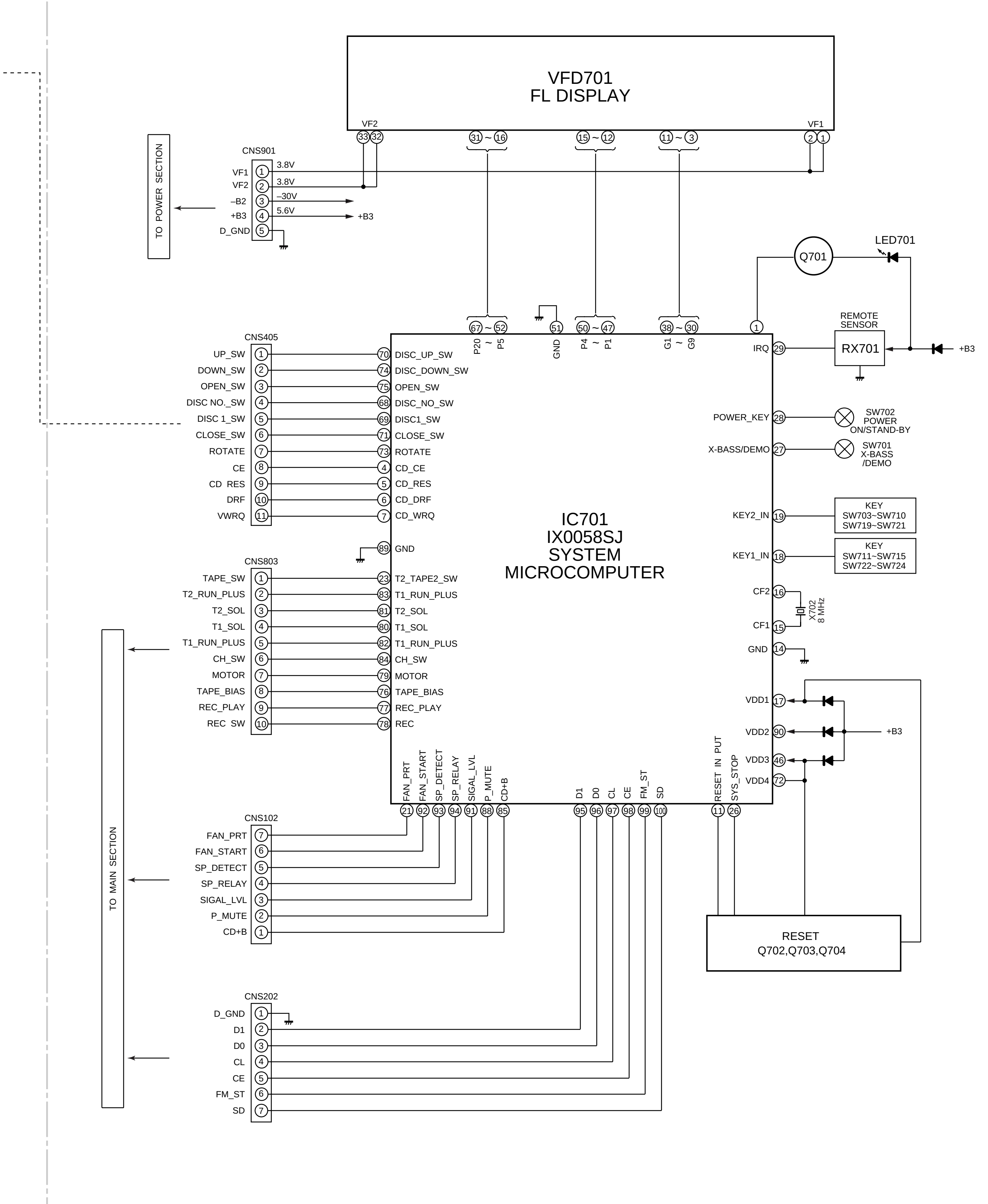
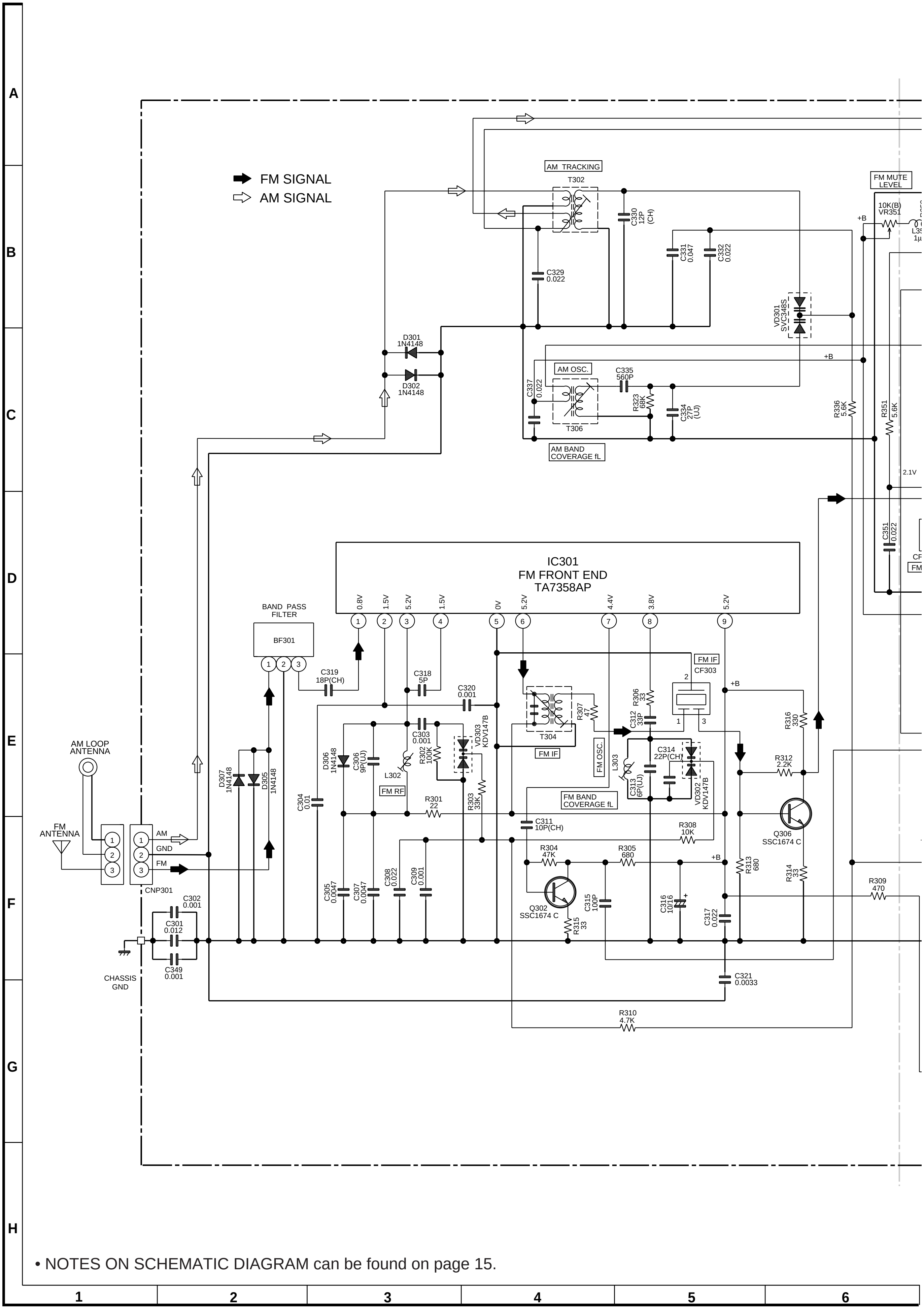
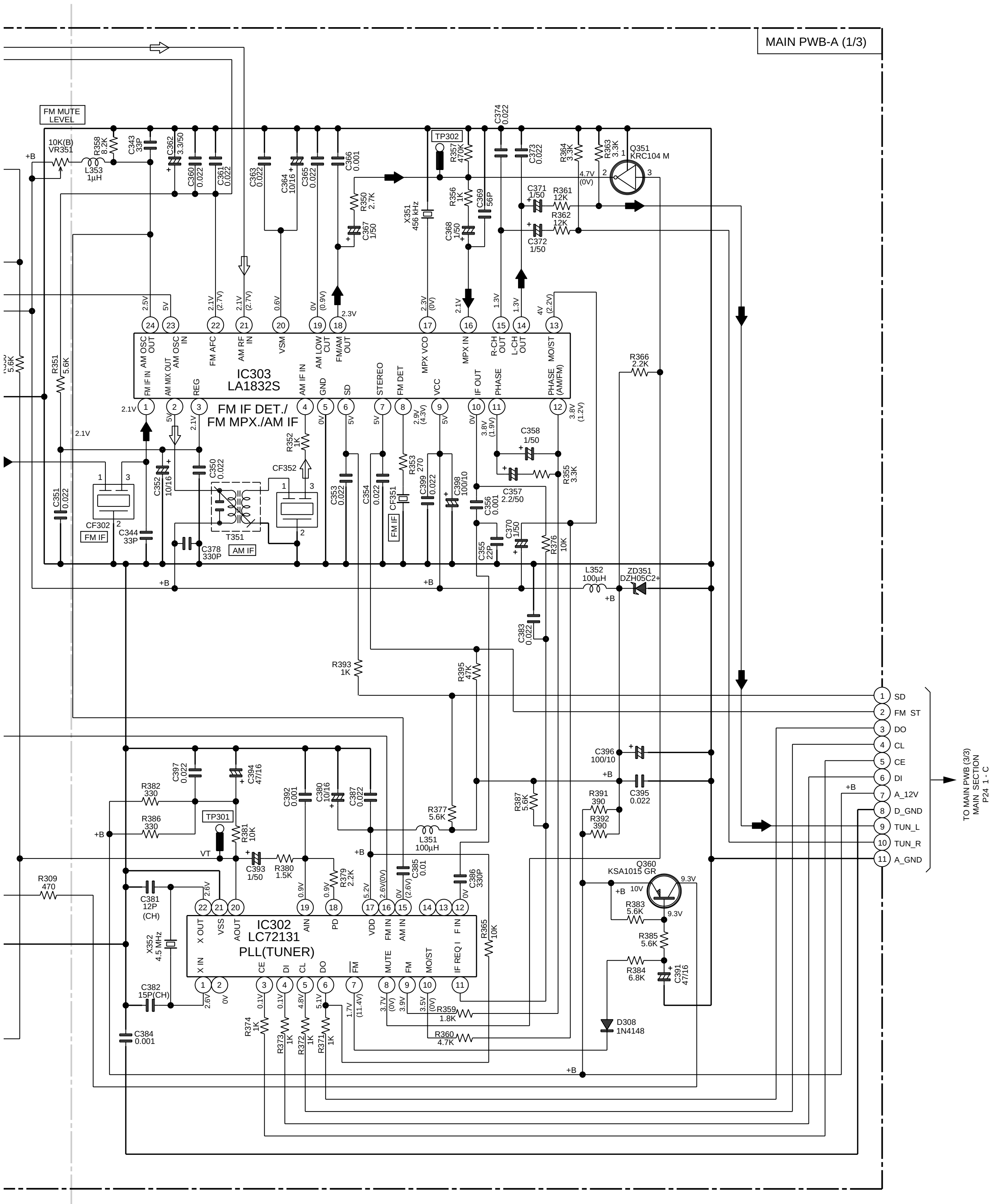


Figure 19 BLOCK DIAGRAM (4/4)



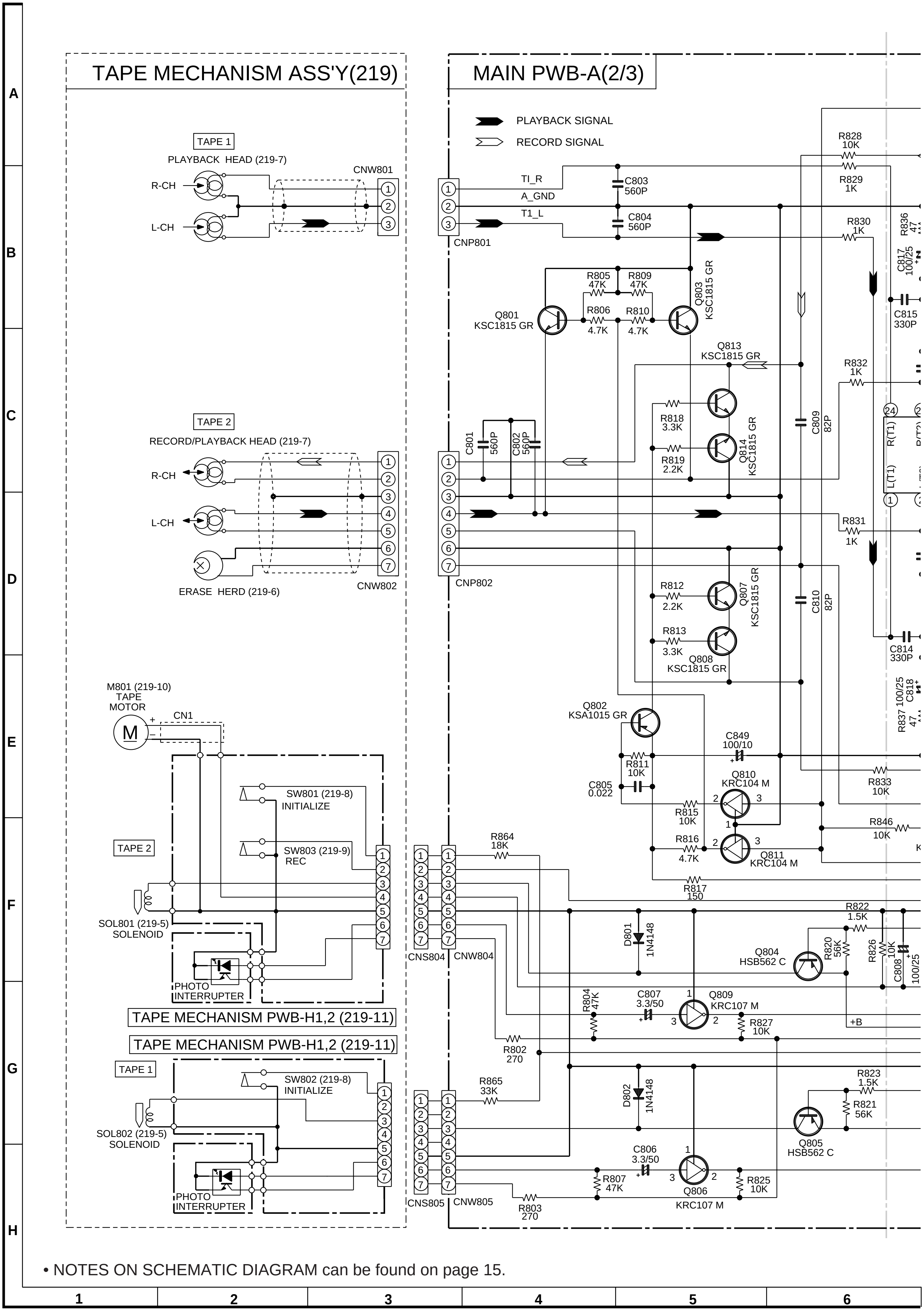
• NOTES ON SCHEMATIC DIAGRAM can be found on page 15.

Figure 20 SCHEMATIC DIAGRAM (1/11)



7	8	9	10	11	12

Figure 21 SCHEMATIC DIAGRAM (2/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 15.

Figure 22 SCHEMATIC DIAGRAM (3/11)

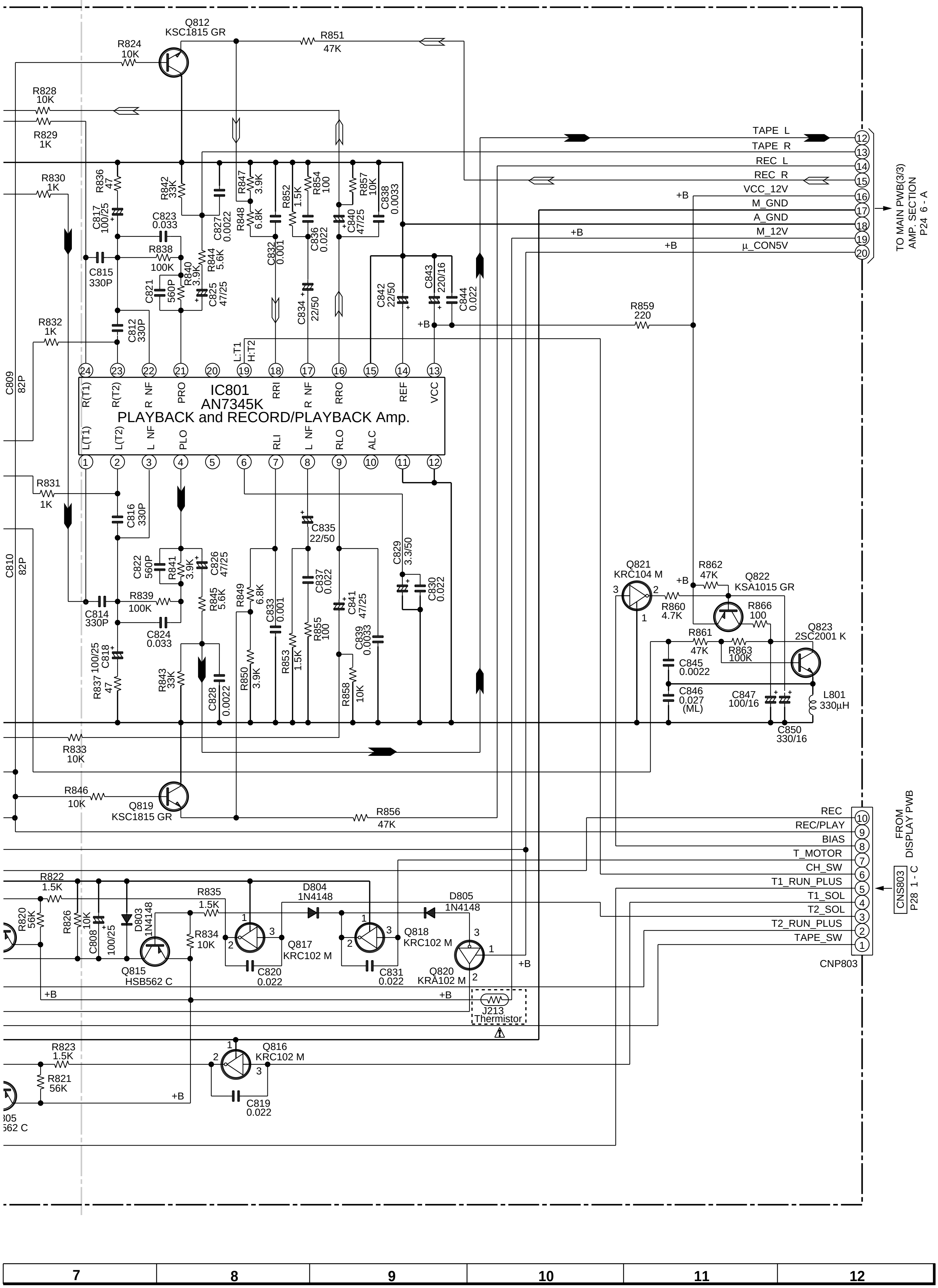
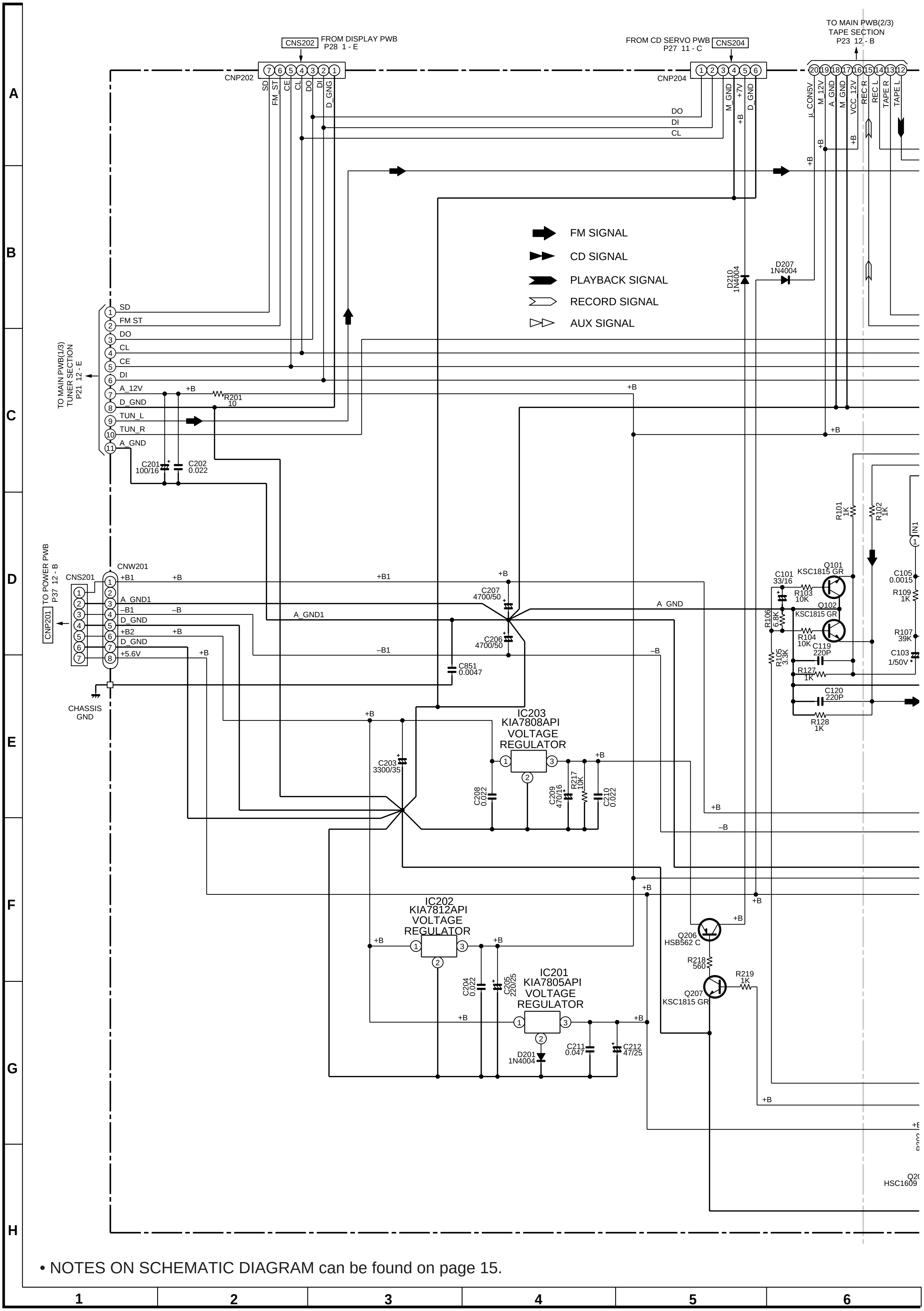
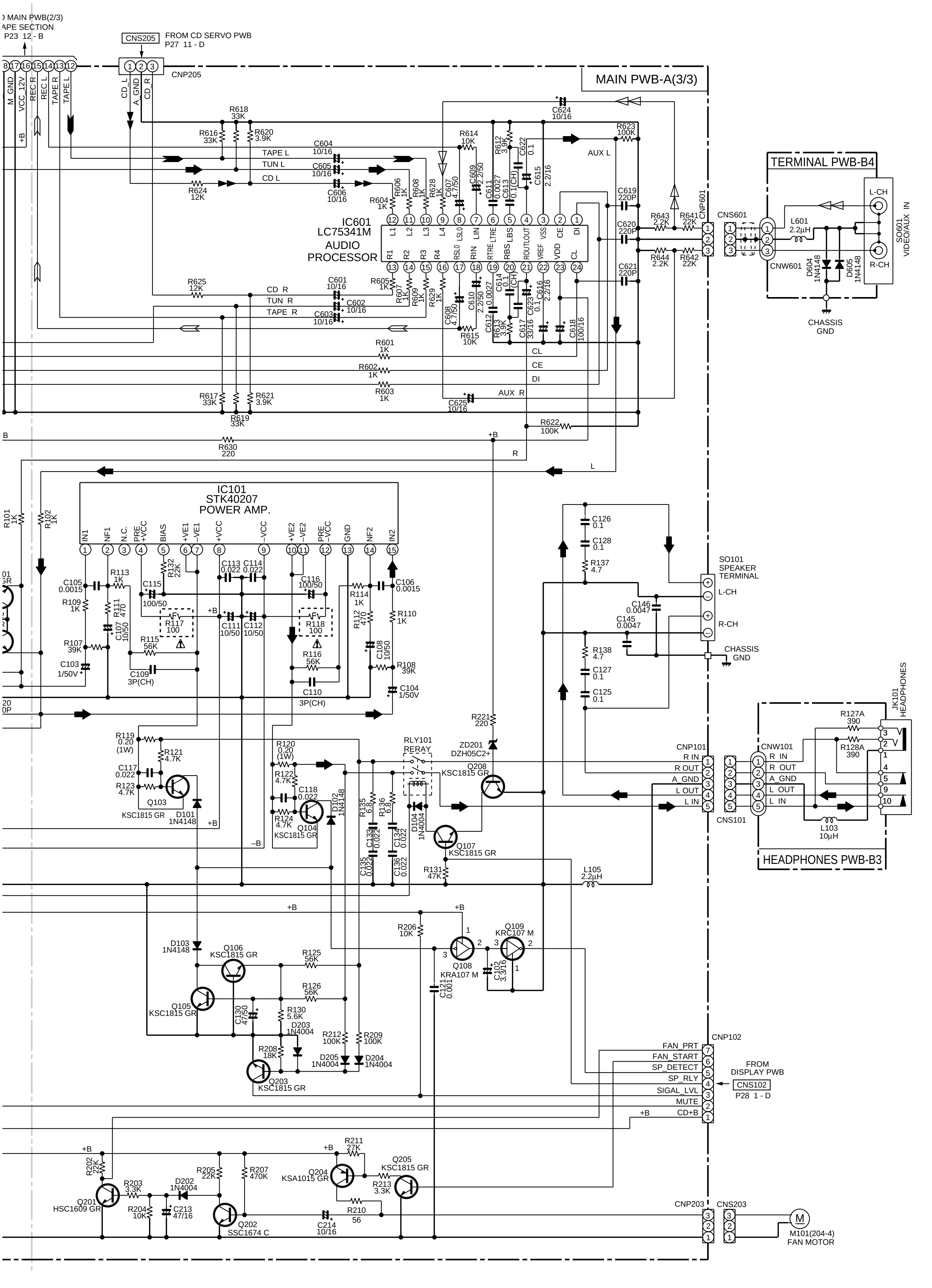


Figure 23 SCHEMATIC DIAGRAM (4/11)



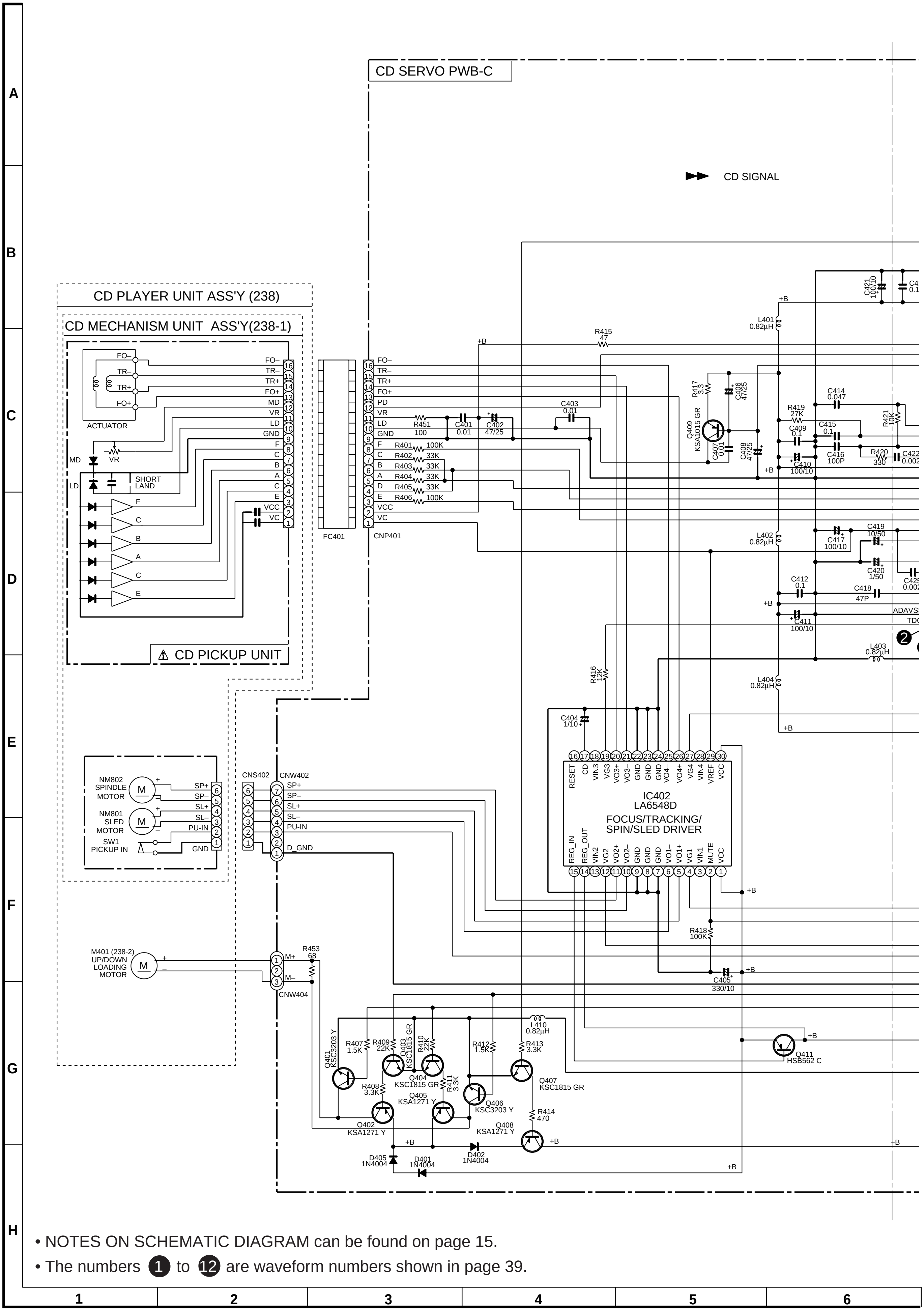
• NOTES ON SCHEMATIC DIAGRAM can be found on page 15.

Figure 24 SCHEMATIC DIAGRAM (5/11)



7	8	9	10	11	12

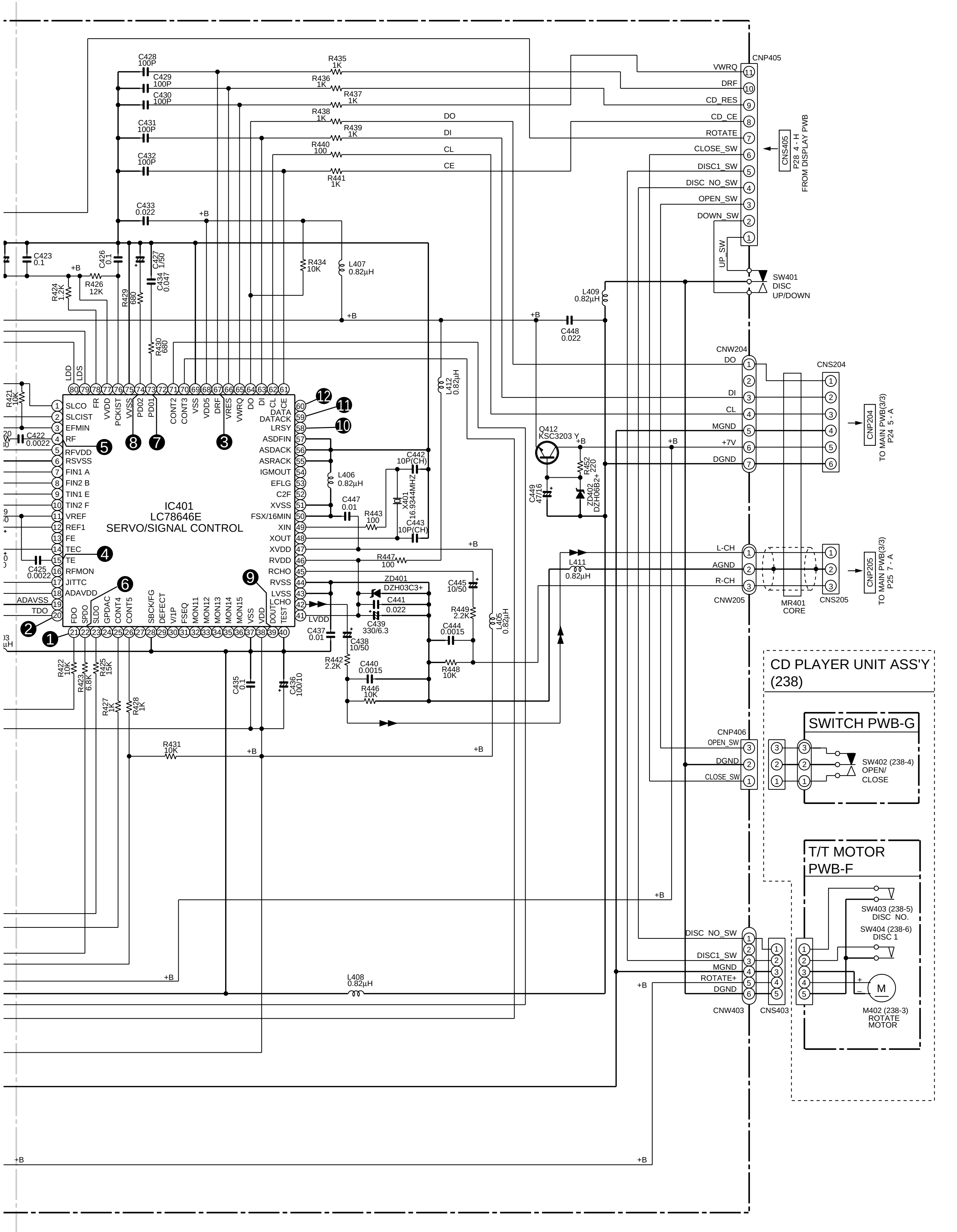
Figure 25 SCHEMATIC DIAGRAM (6/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 15.

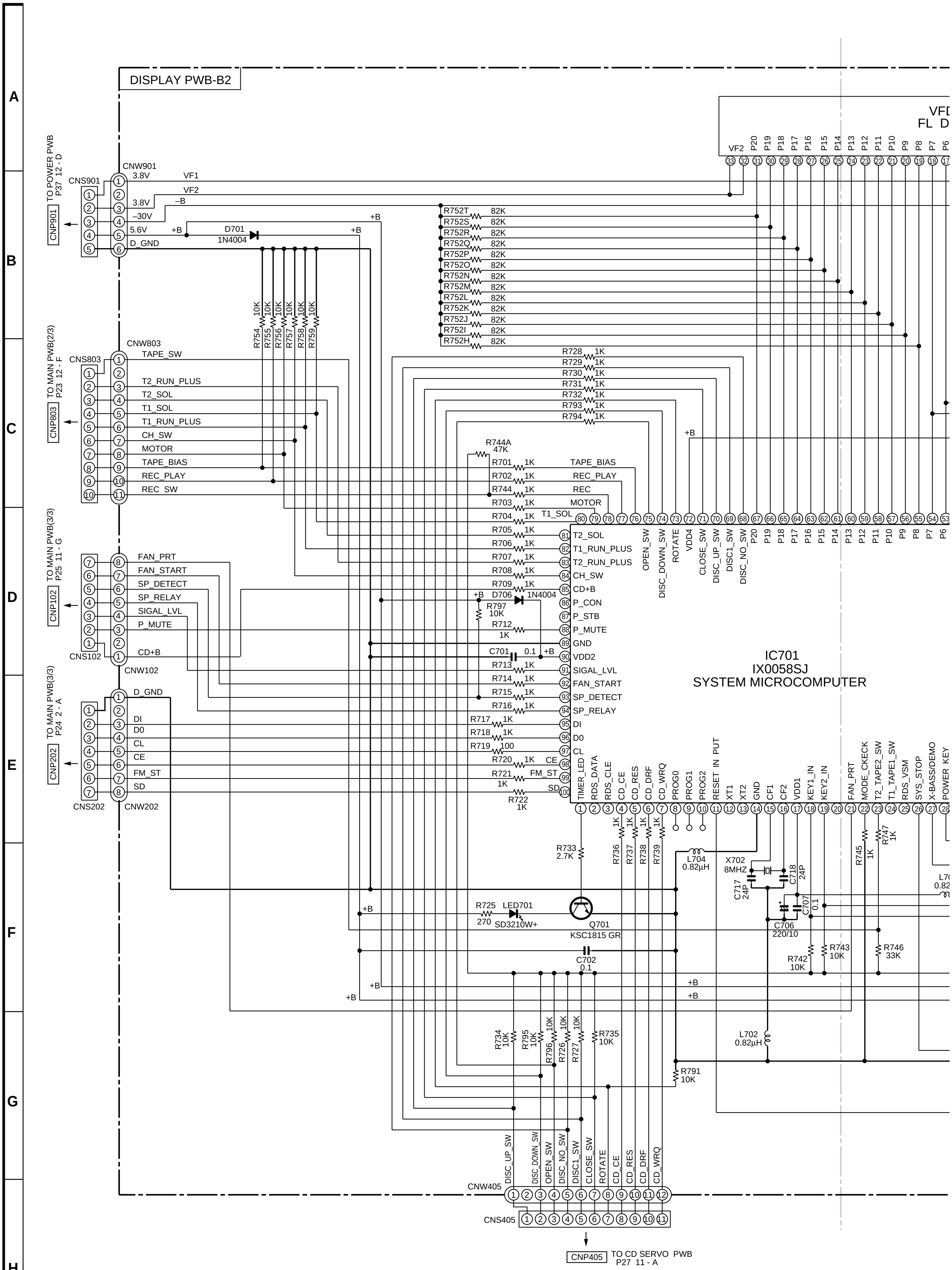
• The numbers 1 to 12 are waveform numbers shown in page 39.

Figure 26 SCHEMATIC DIAGRAM (7/11)



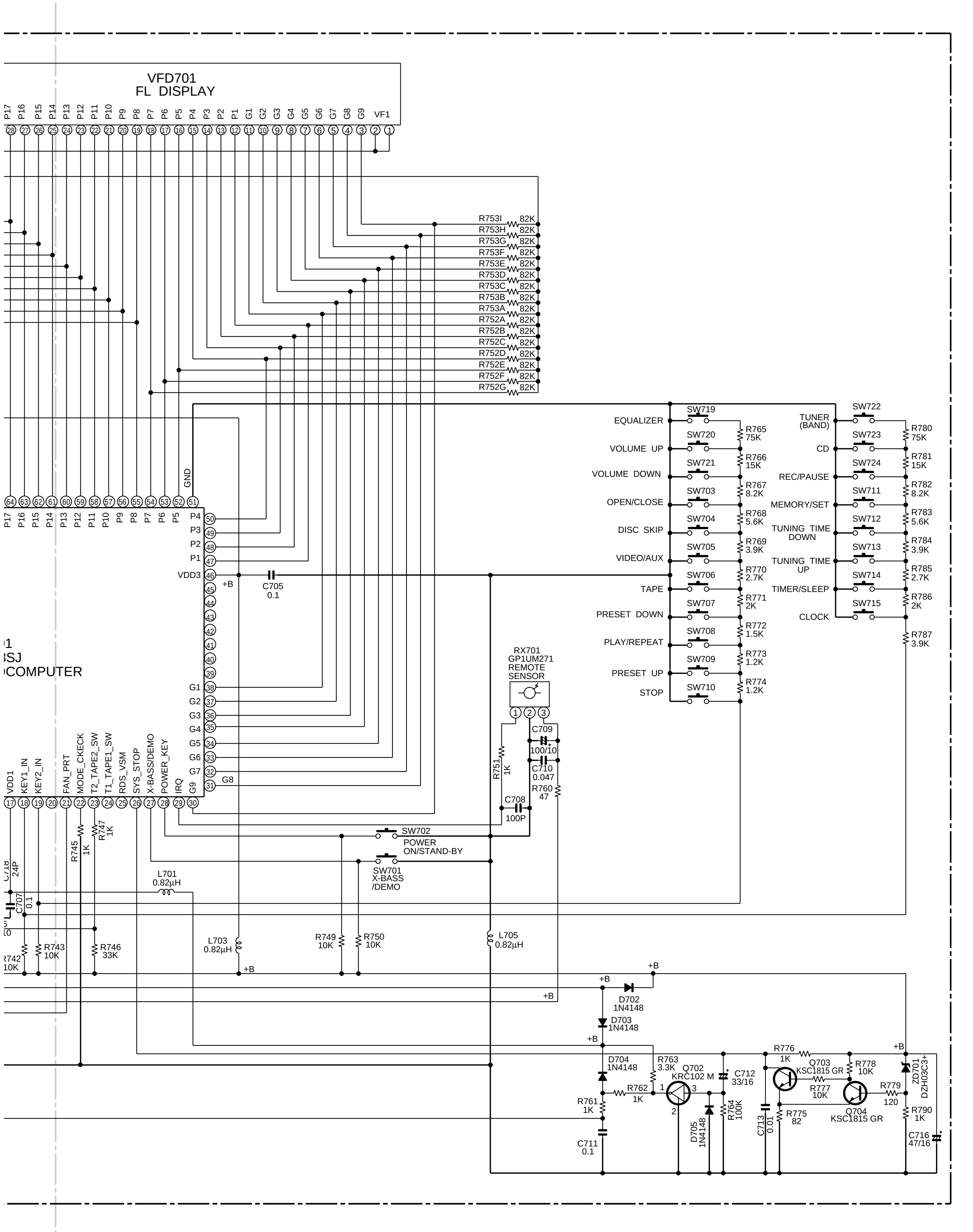
7	8	9	10	11	12

Figure 27 SCHEMATIC DIAGRAM (8/11)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 15.

Figure 28 SCHEMATIC DIAGRAM (9/11)



7	8	9	10	11	12

Figure 29 SCHEMATIC DIAGRAM (10/11)

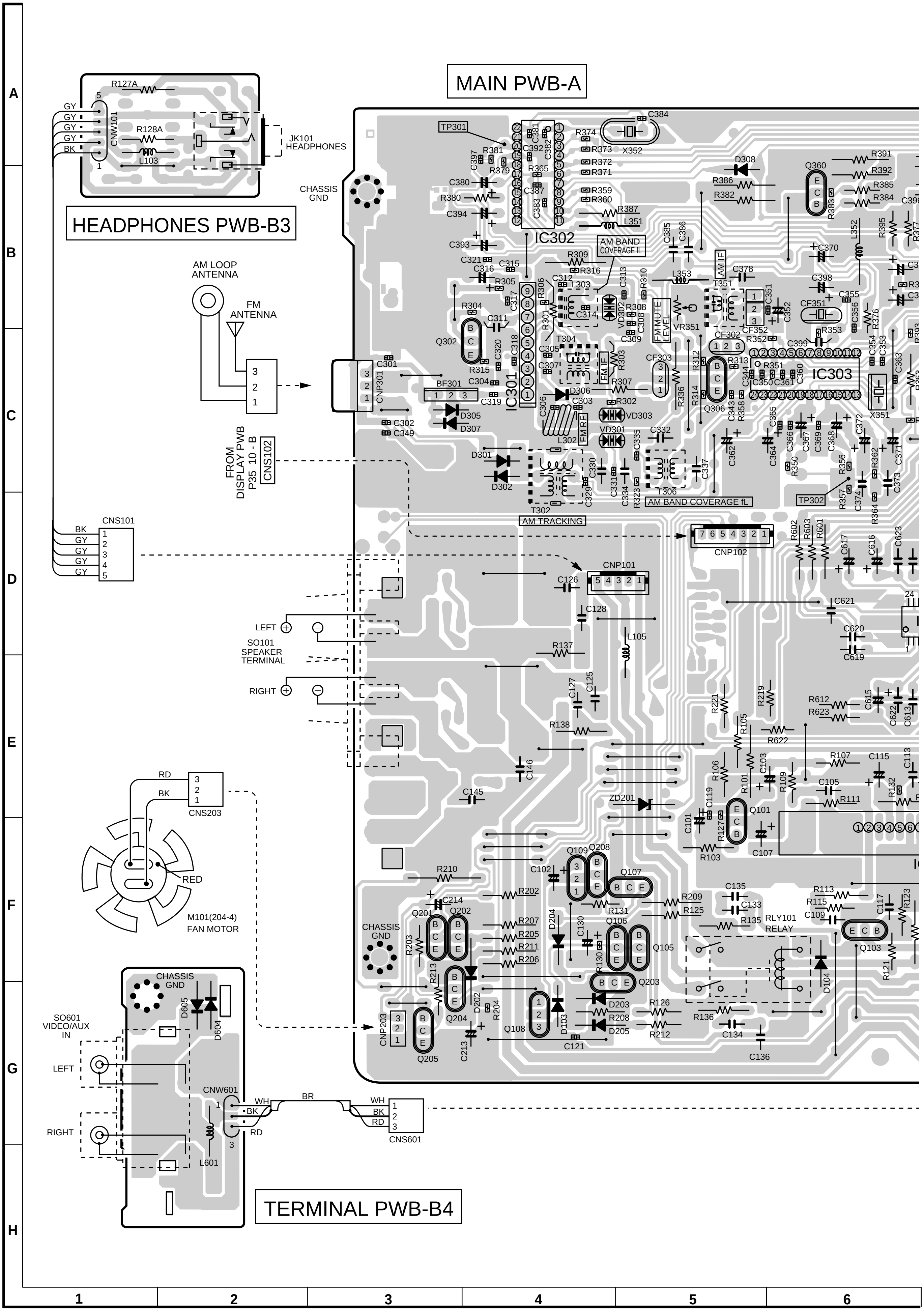
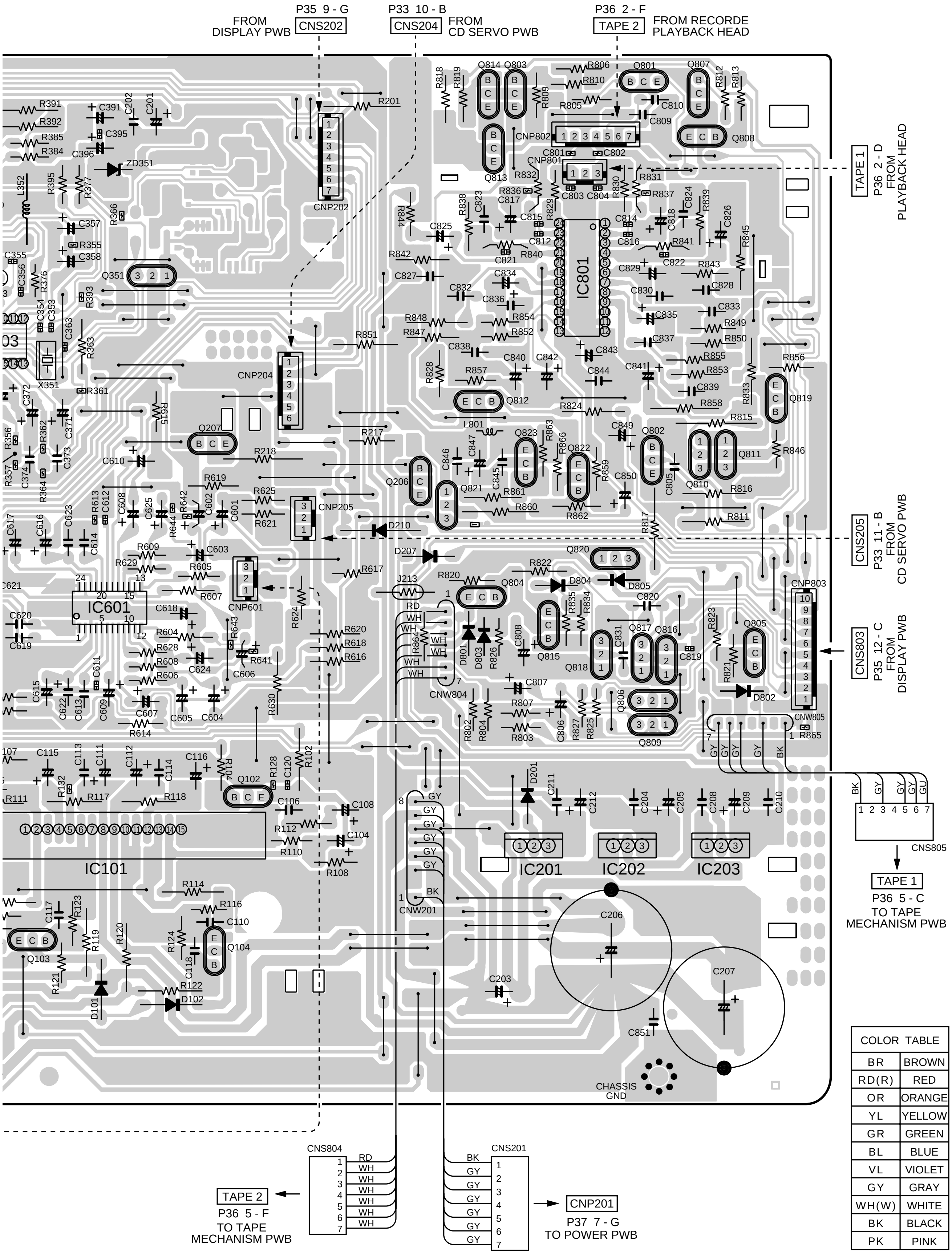


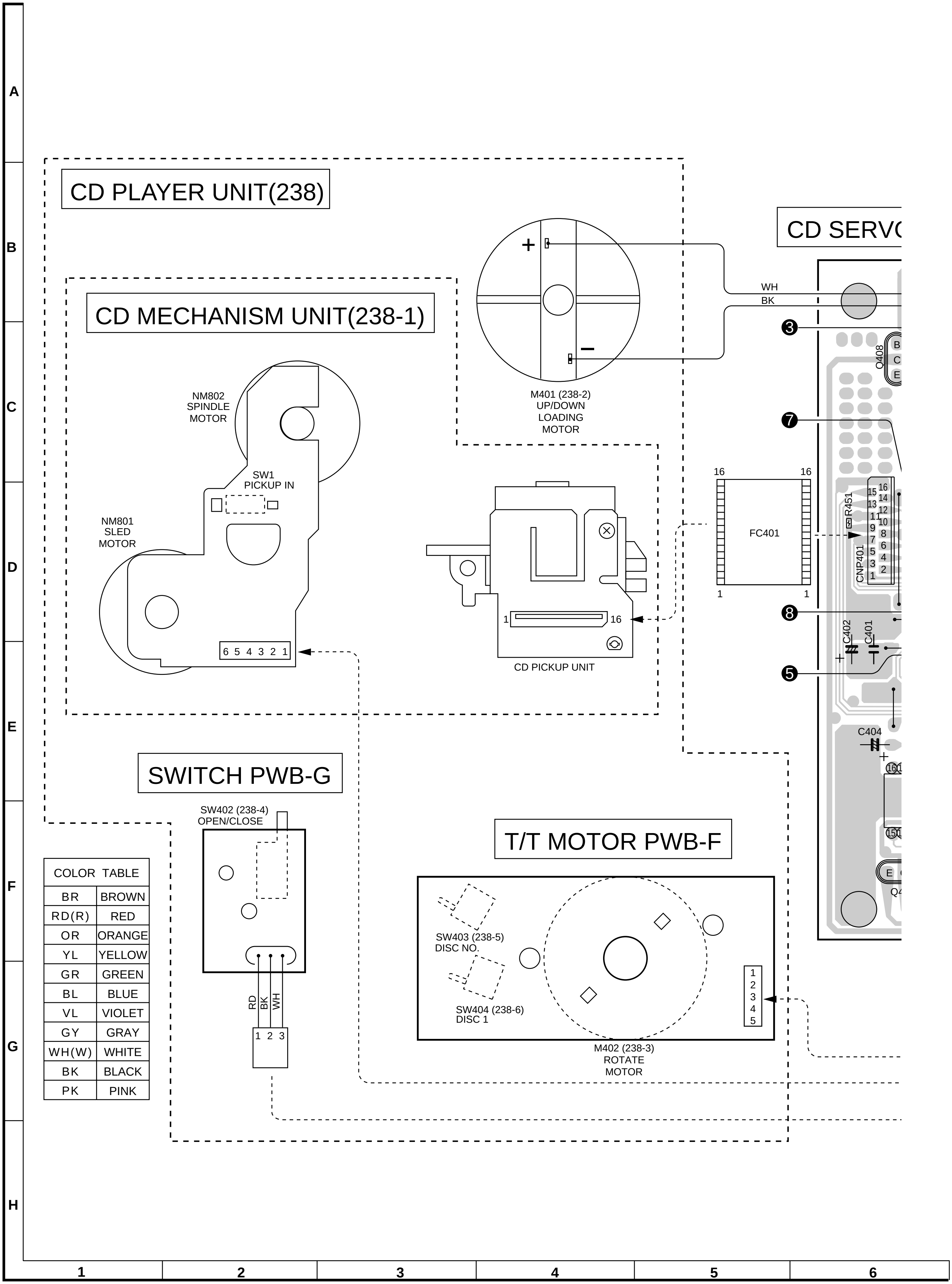
Figure 30 WIRING SIDE OF P.W.BOARD (1/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

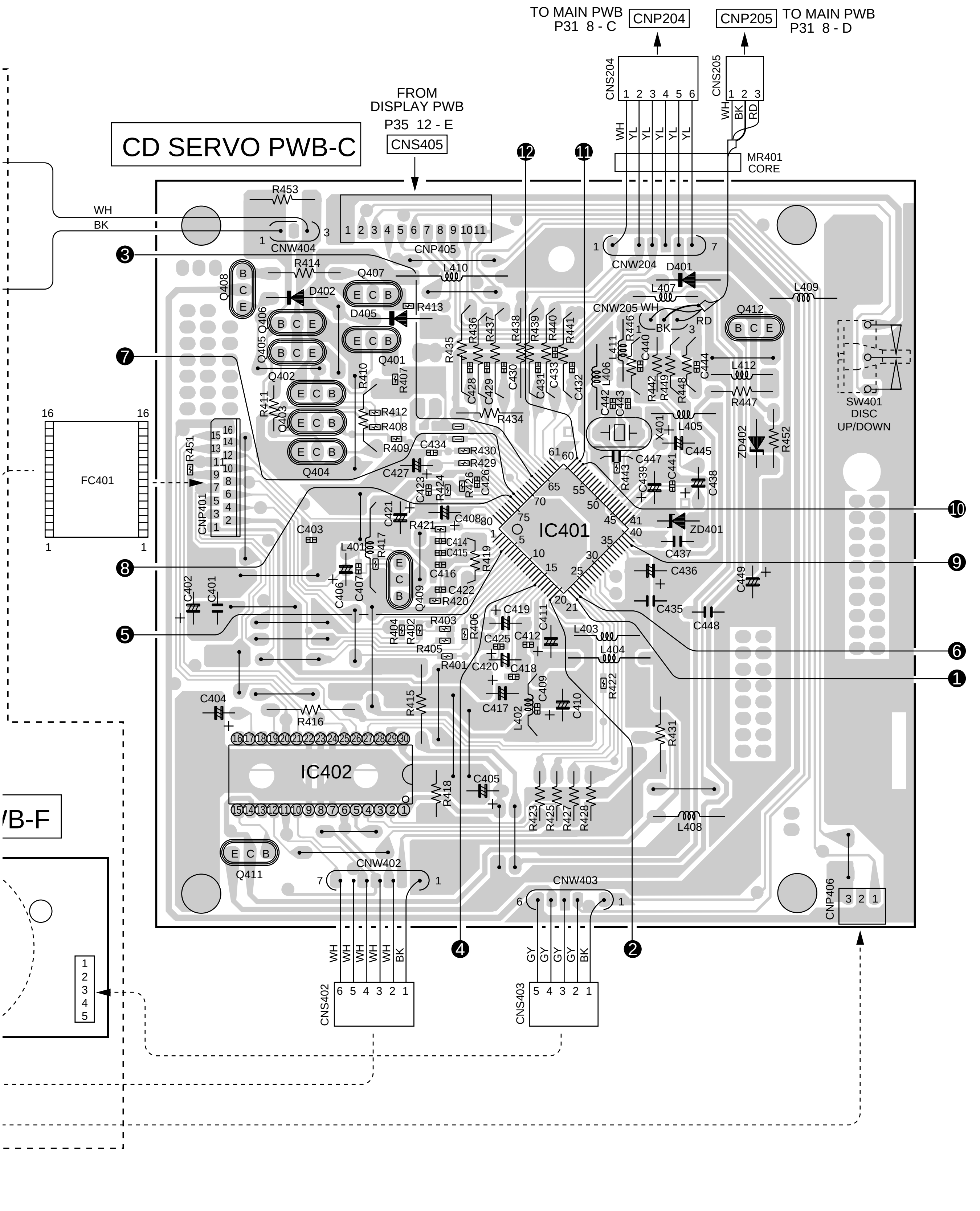
7	8	9	10	11	12

Figure 31 WIRING SIDE OF P.W.BOARD (2/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 32 WIRING SIDE OF P.W.BOARD (3/8)



• The numbers ❶ to ⓬ are waveform numbers shown in page 39.

7	8	9	10	11	12

Figure 33 WIRING SIDE OF P.W.BOARD (4/8)

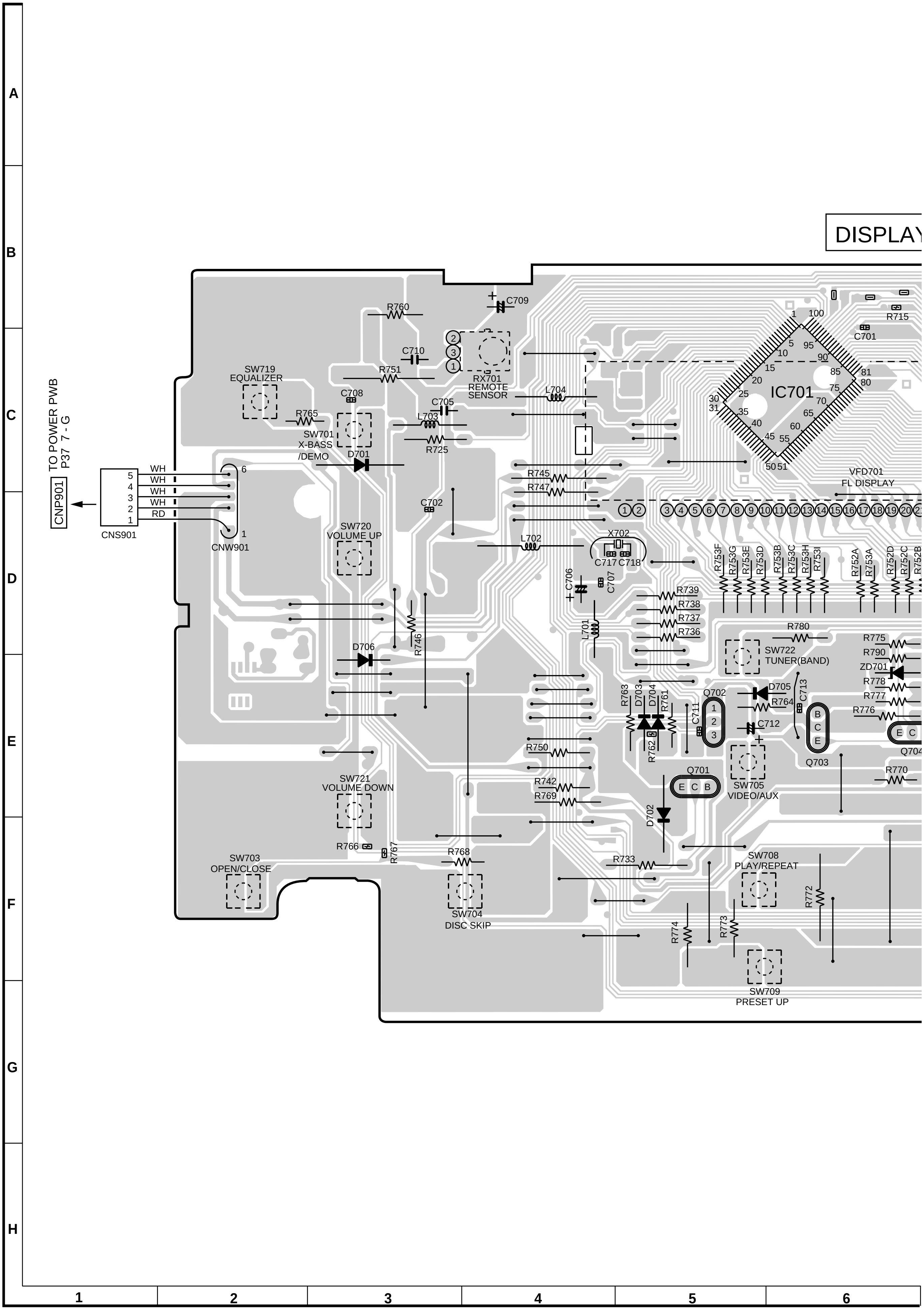
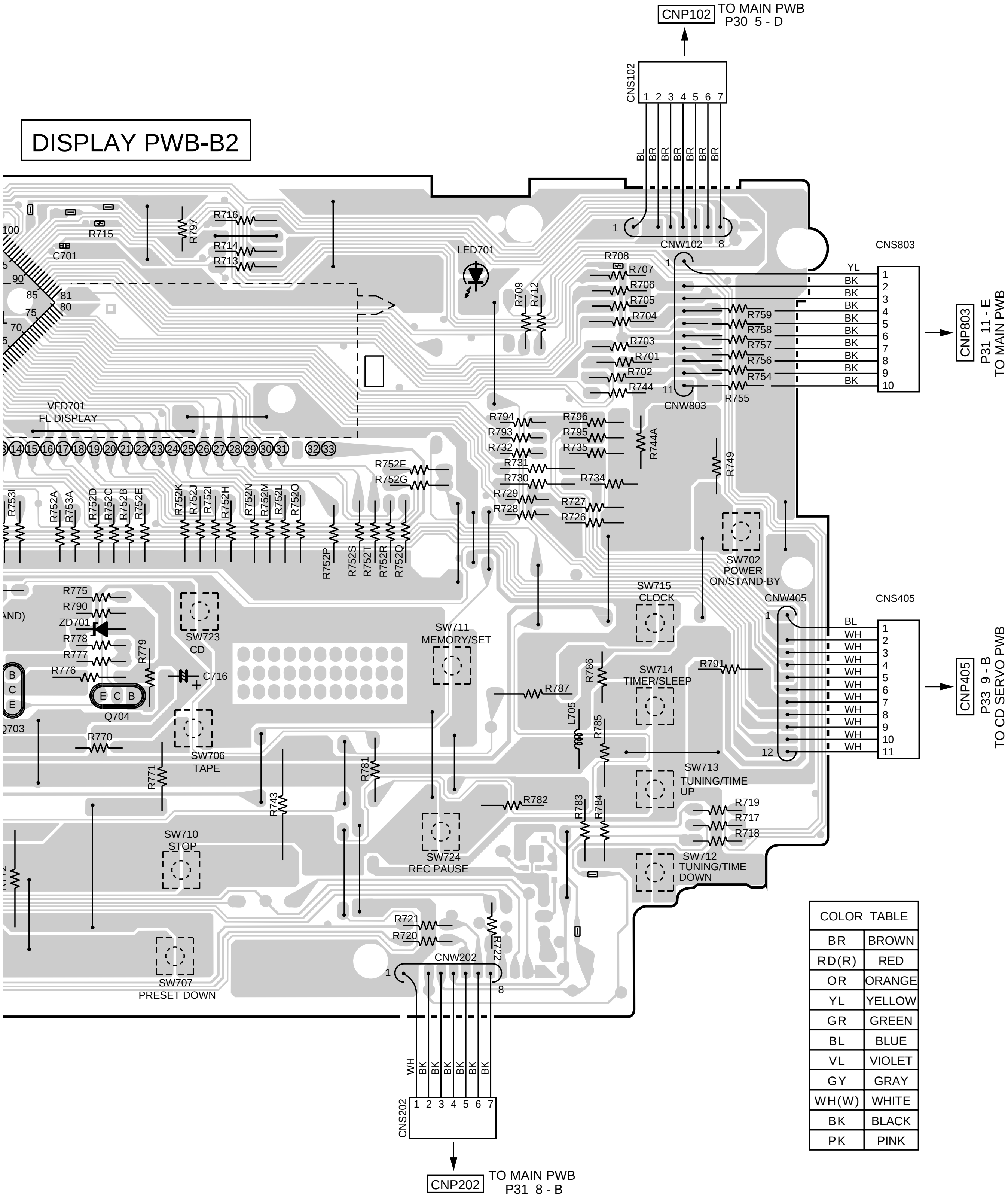


Figure 34 WIRING SIDE OF P.W.BOARD (5/8)

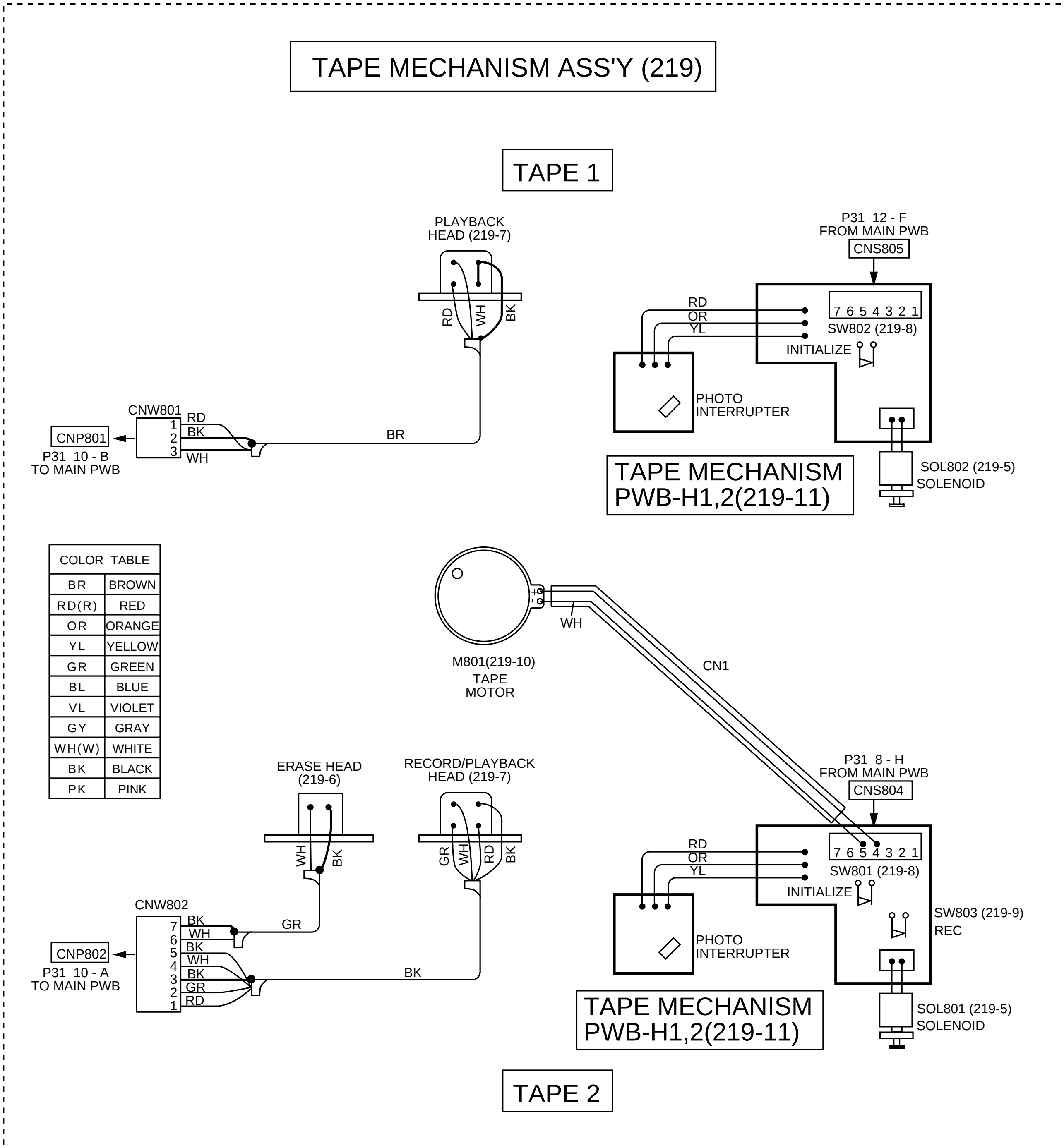
DISPLAY PWB-B2



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

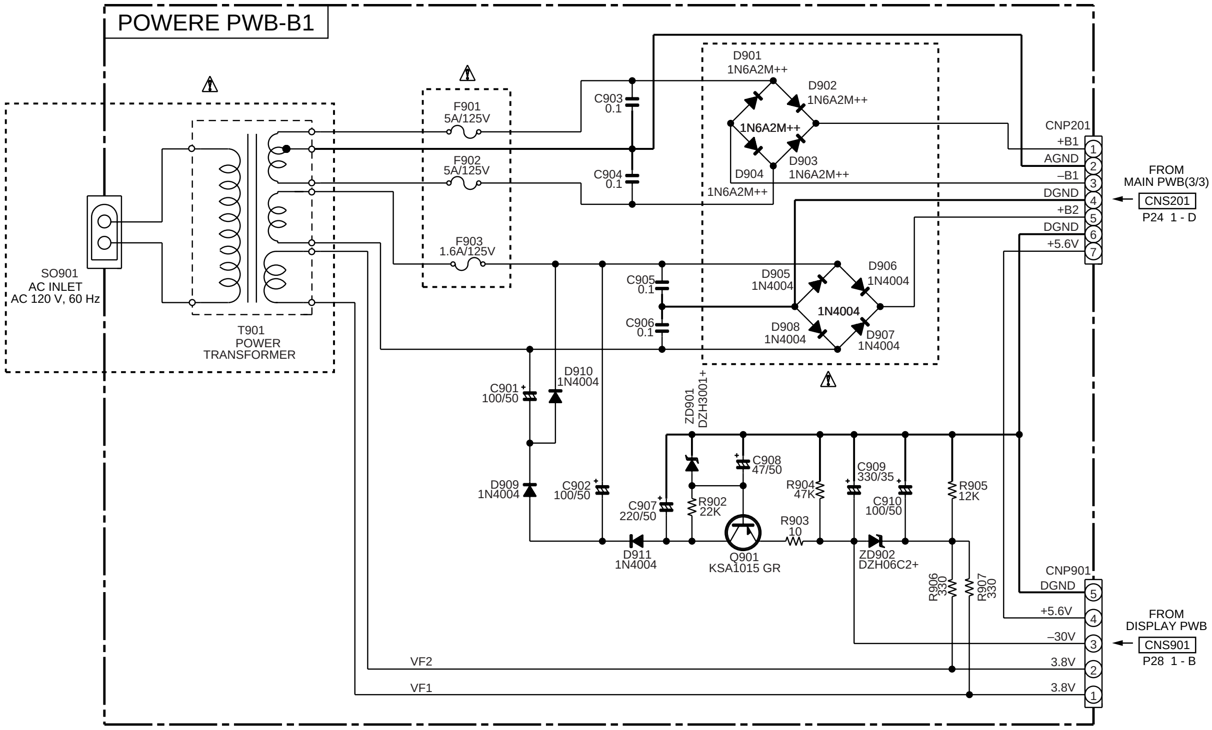
7	8	9	10	11	12

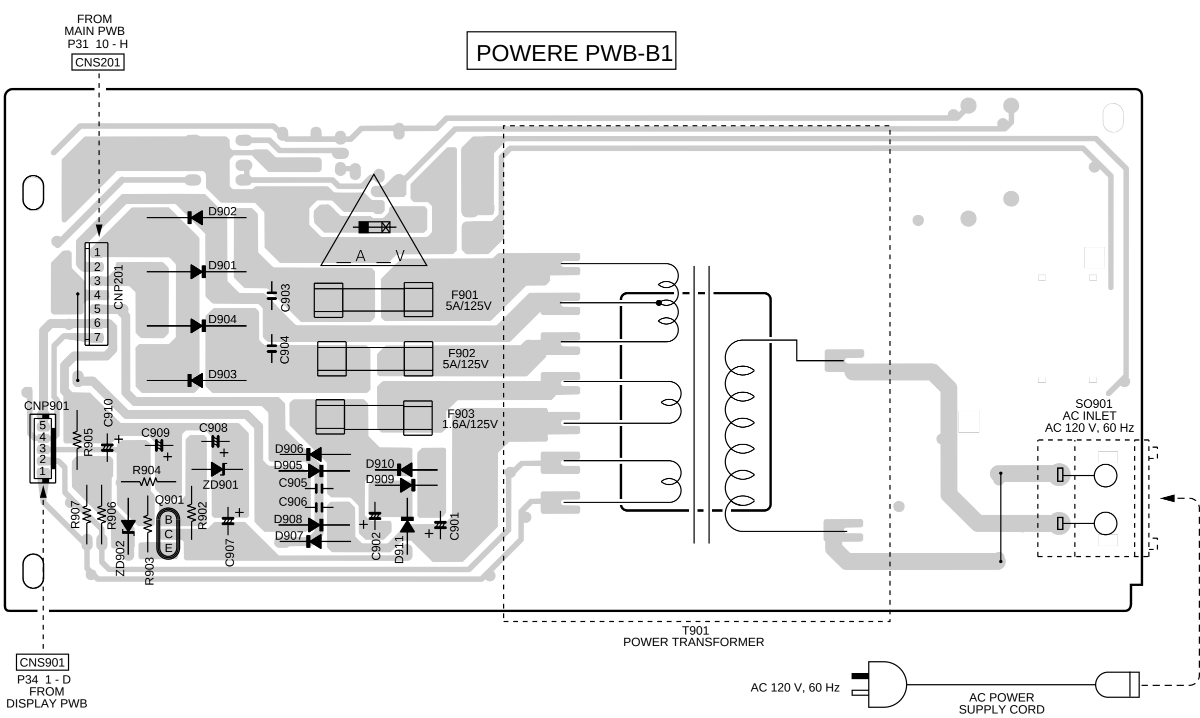
Figure 35 WIRING SIDE OF P.W.BOARD (6/8)



COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 36 WIRING SIDE OF P.W.BOARD (7/8)





7	8	9	10	11	12

Figure 37 SCHEMATIC DIAGRAM (11/11) / WIRING SIDE OF P.W.BOARD (8/8)

VOLTAGE

IC101

PIN NO.	VOLTAGE
1	1.45V
2	0V
3	0.02V
4	33V
5	-33V
6	0V
7	0V
8	33V
9	-33V
10	0V
11	0V
12	-33V
13	0V
14	0V
15	0V

IC201

PIN NO.	VOLTAGE
1	19V
2	0.65V
3	5.61V

IC202

PIN NO.	VOLTAGE
1	19V
2	0V
3	12V

IC203

PIN NO.	VOLTAGE
1	19V
2	0V
3	7.9V

IC402

PIN NO.	VOLTAGE
1	7.1V
2	1.6V
3	0V
4	1.6V
5	3V
6	3V
7	0V
8	0V
9	0V
10	3.1V
11	3.1V
12	1.6V
13	1.64V
14	3.8V
15	3.2V
16	6.48V
17	3.25V
18	1.64V
19	1.6V
20	3V
21	3V
22	0V
23	0V
24	0V
25	3V
26	3V
27	1.6V
28	1.65V
29	0V
30	7.1V

Q101

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.625V

Q102

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.63V

IC401

PIN NO.	VOLTAGE
1	1.6V
2	1V
3	1.6V
4	1.5V
5	3.25V
6	0V
7	1.6V
8	1.63V
9	1.6V
10	1.6V
11	1.6V
12	1.6V
13	1.6V
14	1.4V
15	1.4V
16	0.09V
17	1.1V
18	3.2V
19	0V
20	1.6V
21	1.6V
22	1.6V
23	1.6V
24	0.04V
25	0V
26	3.25V
27	2.30V
28	3.25V
29	0.04V
30	0V
31	0V
32	0V
33	0V
34	0V
35	0V
36	0V
37	0V
38	3.25V
39	0V
40	0V
41	3.5V
42	1.73V
43	0V
44	0V
45	1.6V
46	1.55V
47	1.65V
48	1.65V
49	1.64V
50	0.04V
51	0.04V
52	0V
53	0V
54	0V
55	0V
56	0V
57	0V
58	0V
59	0V
60	0V
61	0V
62	4.86V
63	4.86V
64	5.11V
65	5.05V
66	4.86V
67	0V
68	5.04V
69	0V
70	0V
71	0.63V
72	0.50V
73	0.64V
74	0.01V
75	0V
76	1.04V
77	3.25V
78	2.47V
79	0V
80	3.23V

Q103

PIN NO.	VOLTAGE
1	0V
2	5.3V
3	0V

IC601

PIN NO.	VOLTAGE
1	3.7V
2	0V
3	0V
4	3.52V
5	3.5V
6	3.5V
7	3.5V
8	3.52V
9	3.52V
10	3.52V
11	3.52V
12	3.52V
13	3.52V
14	3.52V
15	3.52V
16	3.52V
17	3.52V
18	3.52V
19	3.52V
20	3.52V
21	3.52V
22	3.52V
23	7V
24	3.52V

IC801

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.56V
4	2.42V
5	0V
6	0.06V
7	0V
8	0.58V
9	4.10V
10	0V
11	0V
12	0V
13	8.25V
14	4.82V
15	0V
16	4.1V
17	0.58V
18	0V
19	2.5V
20	0V
21	2.4V
22	0.56V
23	0V
24	0V

Q104

PIN NO.	VOLTAGE
1	0V
2	5.34V
3	0V

Q105

PIN NO.	VOLTAGE
1	0V
2	5.28V
3	0V

Q106

PIN NO.	VOLTAGE
1	0V
2	5.28V
3	0V

Q107

PIN NO.	VOLTAGE
1	0.06V
2	0.13V
3	0.87V

Q108

PIN NO.	VOLTAGE
1	5.57V
2	0V
3	5.5V

IC701

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	0V	51	-27.26V
2	0V	52	-27.26V
3	0V	53	-13.05V
4	0V	54	-20.14V
5	0V	55	-20.14V
6	0V	56	-20.14V
7	1.69V	57	-27.35V
8	0V	58	-13V
9	0V	59	-23.70V
10	0V	60	-27.25V
11	4.83V	61	-28.12V
12	0V	62	-23.72V
13	0V	63	-23.63V
14	0V	64	-22.71V
15	2.22V	65	-27.27V
16	2.48V	66	-27.27V
17	4.85V	67	-27.27V
18	4.81V	68	4.72V
19	4.82V	69	4.72V
20	5.29V	70	0V
21	5.29V	71	0V
22	0V	72	0V
23	4.8V	73	4.71V
24	0V	74	4.71V
25	0V	75	4.71V
26	4.83V	76	0V
27	4.82V	77	4.72V
28	4.82V	78	4.72V
29	4.86V	79	0V
30	-27V	80	0V
31	-24.85V	81	0V
32	-24.85V	82	0V
33	-24.85V	83	0V
34	-24.85V	84	4.57V
35	-24.85V	85	4.87V
36	-24.85V	86	4.87V
37	-24.85V	87	4.77V
38	-24.85V	88	4.77V
39	-20.48V	89	0V
40	-20.48V	90	4.88V
41	-20.48V	91	5.34V
42	-20.48V	92	0V
43	-20.48V	93	4.87V
44	-20.48V	94	4.30V
45	-16.61V	95	0V
46	-4.82V	96	0V
47	-24.83V	97	4.64V
48	-24.83V	98	0V
49	-16.57V	99	0V
50	-16.57V	100	0V

Q109

PIN NO.	VOLTAGE
1	0V
2	4.88V
3	0V

Q201

PIN NO.	VOLTAGE
1	0V
2	5.34V
3	0V

Q202

PIN NO.	VOLTAGE
1	0V
2	0.06V
3	0.69V

Q203

PIN NO.	VOLTAGE
1	0V
2	5.56V
3	0V

Q204

PIN NO.	VOLTAGE
1	5.57V
2	0V
3	5.54V

Q205

PIN NO.	VOLTAGE
1	0V
2	5.54V
3	0V

Q206

PIN NO.	VOLTAGE
1	7.43V
2	0.02V
3	7.98V

Q207

PIN NO.	VOLTAGE
1	0V
2	7.43V
3	0V

Q208

PIN NO.	VOLTAGE
1	0.83V
2	0.66V
3	0V

Q302

PIN NO.	VOLTAGE
1	0.12V
2	2.46V
3	0.88V

Q306

PIN NO.	VOLTAGE
1	0.09V
2	3.64V
3	0.84V

Q401

PIN NO.	VOLTAGE
1	0V
2	4V
3	0V

Q402

PIN NO.	VOLTAGE
1	0.45V
2	0V
3	5.96V

Q403

PIN NO.	VOLTAGE
1	0V
2	5.9V
3	0V

Q404

PIN NO.	VOLTAGE
1	0V
2	5.96V
3	0V

Q405

PIN NO.	VOLTAGE
1	6.46V
2	0V
3	5.96V

Q406

PIN NO.	VOLTAGE
1	0V
2	5V
3	0V

Q407

PIN NO.	VOLTAGE
1	0V
2	6V
3	0V

Q408

PIN NO.	VOLTAGE
1	0.1V
2	0V
3	5.9V

Q409

PIN NO.	VOLTAGE
1	3.24V
2	0V
3	2.26V

Q411

PIN NO.	VOLTAGE
1	7.13V
2	3.27V
3	6.49V

Q412

PIN NO.	VOLTAGE
1	5.10V
2	7.14V
3	5.8V

Q701

PIN NO.	VOLTAGE
1	0V
2	3.72V
3	0V

Q702

PIN NO.	VOLTAGE
1	0V
2	4.84V
3	0V

Q703

PIN NO.	VOLTAGE
1	0.3V
2	4.83V
3	0.31V

Q704

PIN NO.	VOLTAGE
1	0.31V
2	0.31V
3	1.66V

Q801

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.03V

Q802

PIN NO.	VOLTAGE
1	4V
2	3.96V
3	3.33V

Q803

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.03V

Q804

PIN NO.	VOLTAGE
1	11.8V
2	0V
3	11.9V

Q805

PIN NO.	VOLTAGE
1	11.9V
2	0V
3	11.8V

Q806

PIN NO.	VOLTAGE
1	0V
2	0V
3	0V

Q807

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.7V

Q808

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.7V

Q809

PIN NO.	VOLTAGE
1	0V
2	0V
3	0V

Q810

PIN NO.	VOLTAGE
1	0V
2	0.02V
3	3.65V

Q811

PIN NO.	VOLTAGE
1	0V
2	0.04V
3	3.65V

Q812

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.65V

Q813

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.7V

Q814

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.7V

Q815

PIN NO.	VOLTAGE
1	11.9V
2	0V
3	11.9V

Q816

PIN NO.	VOLTAGE
1	0V
2	11.8V
3	0V

Q817

PIN NO.	VOLTAGE
1	0V
2	11.8V
3	0V

Q818

PIN NO.	VOLTAGE
1	0V
2	11.6V
3	0V

Q819

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.65V

Q820

PIN NO.	VOLTAGE
1	4.9V
2	0V
3	4.9V

Q821

PIN NO.	VOLTAGE
1	11.9V
2	0V
3	0V

Q822

PIN NO.	VOLTAGE
1	11.9V
2	0V
3	11.9V

Q823

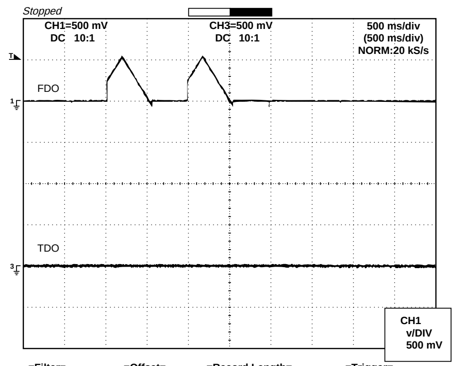
PIN NO.	VOLTAGE
1	0V
2	0V
3	0V

Q901

PIN NO.	VOLTAGE
1	-27.8V
2	-38V
3	-28.4V

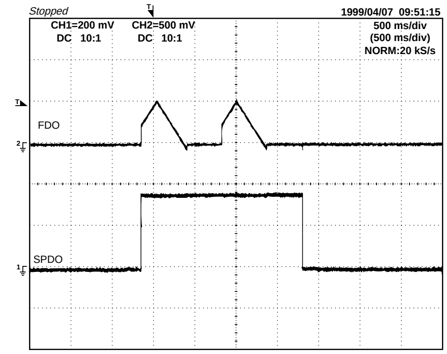
WAVEFORMS OF CD CIRCUIT

1 IC401 (21)
2 IC401 (20)



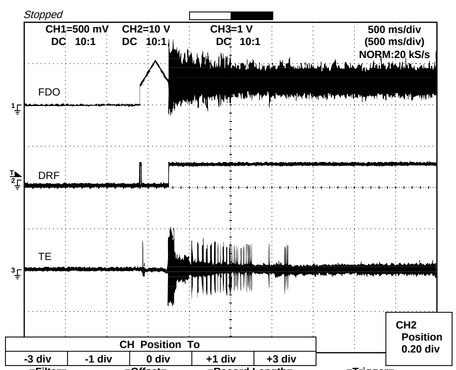
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000 V CH2 : 0.0 V CH3 : 0.000 V CH4 : 0.00 V
=Record Length= Main : 100 K Zoom : 2 K
=Trigger= Mode : AUTO Type : EDGE CH1 Delay : 0.0 ns Hold off : 0.2 µs

1 IC401 (21)
6 IC401 (22)



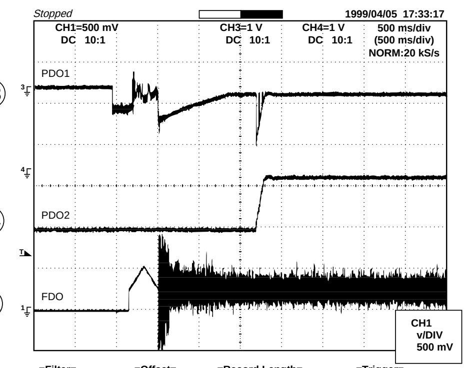
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000 V CH2 : 0.000 V CH3 : 0.00 V CH4 : 0.00 V
=Record Length= Main : 100 K Zoom : 2 K
=Trigger= Mode : NORMAL Type : EDGE CH2 Delay : 2.924 ms Hold off : 0.2 µs

1 IC401 (21)
3 IC401 (67)
4 IC401 (15)



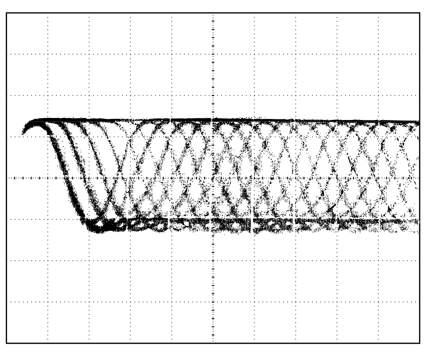
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000 V CH2 : 0.0 V CH3 : 0.00 V CH4 : 0.00 V
=Record Length= Main : 100 K Zoom : 2 K
=Trigger= Mode : AUTO Type : EDGE CH1 Delay : 0.0 ns Hold off : 0.2 µs

7 IC401 (73)
8 IC401 (74)
1 IC401 (21)



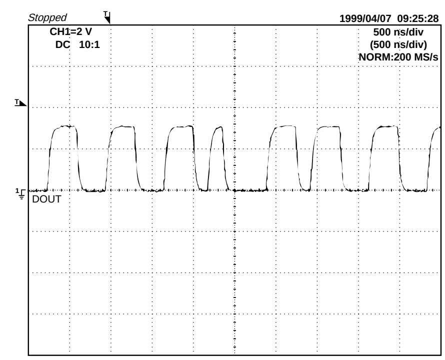
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000 V CH2 : 0.0 V CH3 : 0.00 V CH4 : 0.00 V
=Record Length= Main : 100 K Zoom : 2 K
=Trigger= Mode : AUTO Type : EDGE CH2 Delay : 0.0 ns Hold off : 0.2 µs

5 IC401 (4)



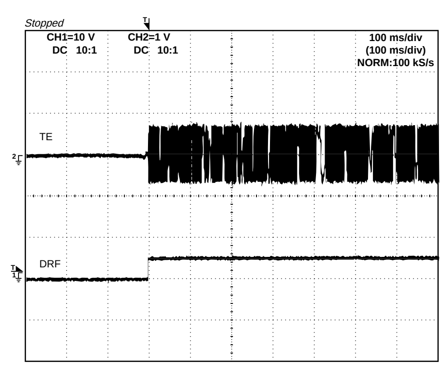
Vp-p=1.0 V~1.3 V
0.5 mV/div,0.5 µsec/div

9 IC401 (39)



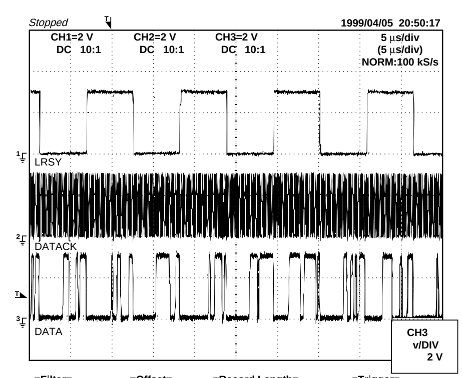
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.00 V CH2 : 0.00 V CH3 : 0.00 V CH4 : 0.00 V
=Record Length= Main : 1 K Zoom : 100
=Trigger= Mode : NORMAL Type : EDGE CH1 Delay : 2.887 ms Hold off : 0.2 µs

4 IC401 (15)
3 IC401 (67)



=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.0 V CH2 : 0.00 V CH3 : 0.00 V CH4 : 0.00 V
=Record Length= Main : 100 K Zoom : 2 K
=Trigger= Mode : NORMAL Type : EDGE CH1 Delay : 2.924 ms Hold off : 0.2 µs

10 IC401 (58)
11 IC401 (59)
12 IC401 (60)



=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.00 V CH2 : 0.00 V CH3 : 0.00 V CH4 : 0.00 V
=Record Length= Main : 5 K Zoom : 100
=Trigger= Mode : AUTO Type : EDGE CH3 Delay : 0.0 ns Hold off : 0.2 µs

TROUBLESHOOTING

When the CD does not function

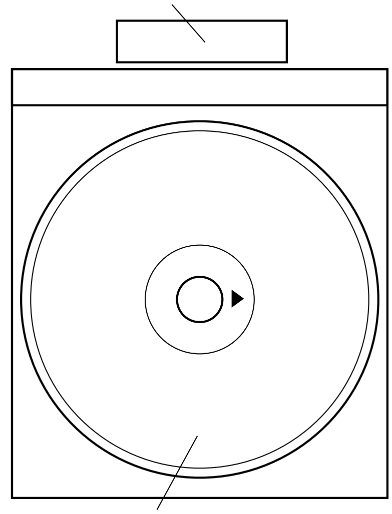
The CD section may not operate when the objective lens of the optical pickup is dirty. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the trouble shooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.
Do not touch the lens with the bare hand.

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it still play continuously, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD-ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.

When a CD cannot be played

1. "E-CD01" is displayed.

(1) Check the power to IC401 (LC78646E), the presence of the clock signal (16.9344 MHz) and the status of the RESET terminal (pin 66 on IC401).
(2) Does the pickup move to the PICKUP-IN Switch (SW1) position ?

If (1) and (2) are OK, check the system microcomputer (especially the communication line with the DSP).

2. Pressing the CD operation key is accepted, but playback does not occur.

(1) Focus-HF system check
(2) Tracking system check
(3) Spin system check
(4) PLL system check
(5) Others

(1) Focus-HF system check.

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the OPEN/CLOSE switch (SW703) without inserting a disc, and try starting the playback operation.

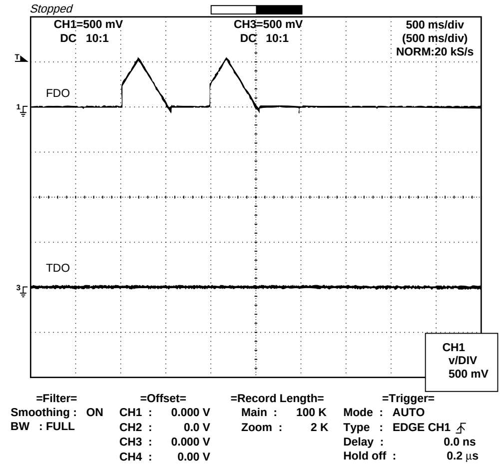


Figure 41-1

1. Does the pickup move to the PICKUP-IN Switch (SW1) position ?
   - No → Sled motor (NM801).
   - Yes ↓
2. Does the focus (lens) move up and down ? (Waveform drawing Figure 41-1)
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit ?
   - No → Check the laser diode driver Q409 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating ?
   - No → Spindle motor (NM802).

When a disc is loaded, start playback operation.

1. Is focus servo activated ? (Waveform drawing Figure 41-2)
   - No → Pins 7~11, 79 and 80 on IC401 Check the laser diode driver Q409 peripheral circuit.
   - Yes ↓
2. Does DRF change from "L" to "H" ?
   - No → Is the disc rotating ? — No → Check the spin system.
     If the disc is spinning and a HF waveform is generated, DRF will go H.
   - Yes ↓
3. Is the HF waveform normal ? (Waveform drawing Figure 41-3)
   - No → If the level is not normal.

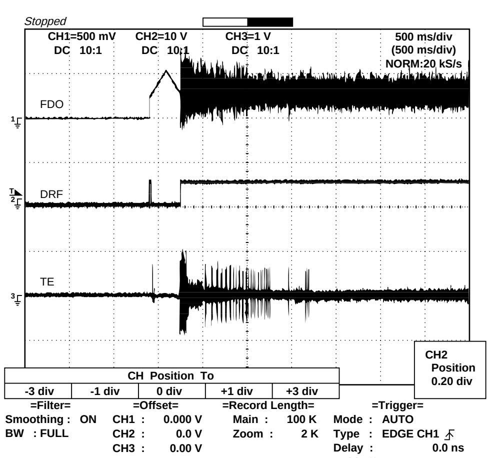
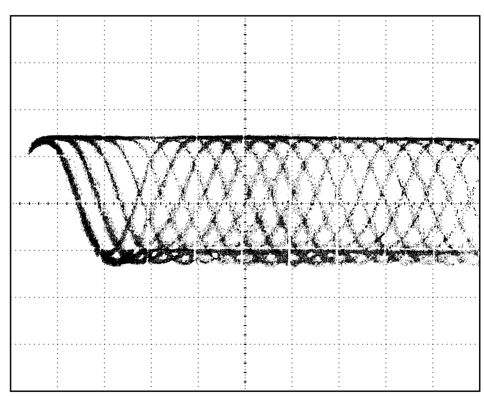


Figure 41-2



Vp-p=1.0 V~1.3 V
0.5 mV/div,0.5 µsec/div

Figure 41-3

(2) Tracking system check.

Check the TE waveform at pin 15 on IC401.

If the waveform shown in Figure 42-1 appears and soon after NO DISC appears ?

- Yes → The tracking servo is not activated. Check the peripheral circuits at pins 14, 15 and 20 on IC401, and FC401.
- No ↓

"Initialization" is possible, but play is not possible ?

- Yes → A normal jump operation cannot be completed or the beginning of the track cannot be found. Check the around pin 20 on IC401.
- No ↓

"Initialization" is not possible. → Data cannot be read. Check the VCO-PLL (Pin73~78 on IC401) system.

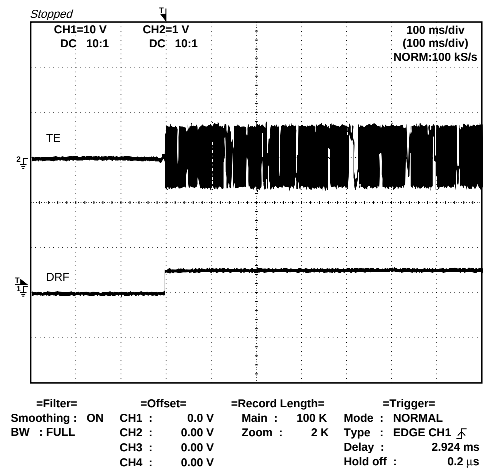


Figure 42-1

(3) Spin system check.

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

↓

1. The turntable rotates a little ? (Waveform drawing Figure 42-2)

- Yes → The spin driver circuit is OK.
- No ↓

2. The turntable doesn't rotate. → Check around pin 22 on IC401, pins 10 and 11 on IC402, and CNS402.

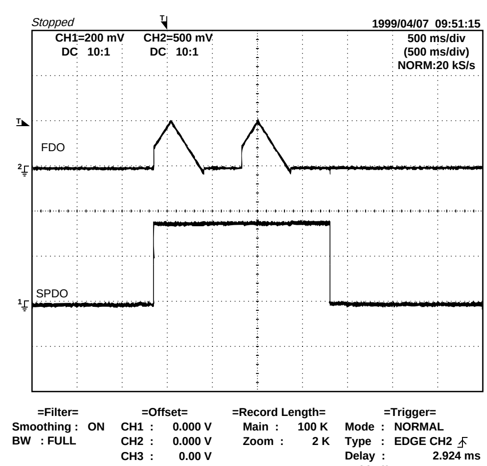


Figure 42-2

(4) PLL system check.

When a disc is loaded, start play operation.

↓

The HF waveform is normal, but the TOC data cannot be read.

↓

Check the PDO waveform. (Figure 43-1)

↓

Check around pins 73~78 on IC401.

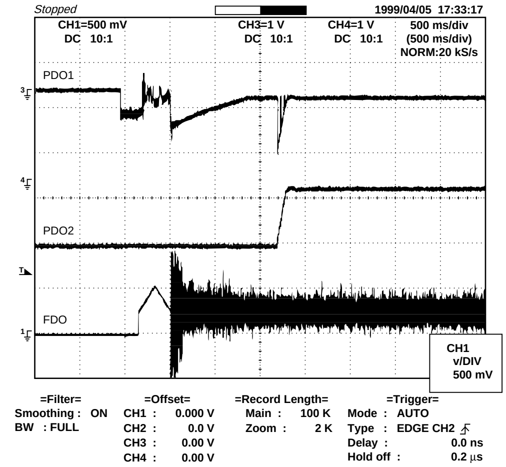


Figure 43-1

(5) Others.

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has dropouts.

Is pin 52 (C2F) on IC401 "L" ?

- No → There are too many error flags on a damaged disc which makes error correction impossible.
  - ↓ Check again using a known good disc.
- Yes ↓

1. When playing at normal speed.
   Check the peripheral circuit at pin 39 (DOUT) on IC401 and the waveform (Figure 43-2).

↓

If OK, Check the unit.

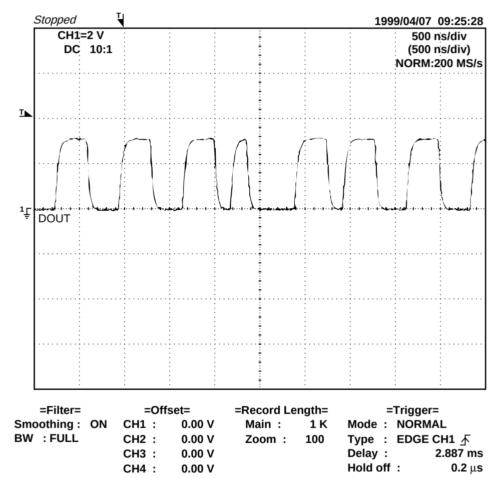


Figure 43-2

FUNCTION TABLE OF IC

IC401 VHiLC78646E-1: Servo/Signal Control (LC78646E) (1/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
1	SLCO	Output	—	For slice level control.	Control output.
2	SLCIST	Input	—		Resistor connection terminal for SLCO output current setting.
3	EFMIN	Input	—		RF signal input terminal.
4	RF	Output	—	RF signal monitor terminal.	
5	RFVDD	Input	—	RF power terminal.	
6	RFVSS	—	—	RF earth terminal. To be connected to 0 V.	
7	FIN1	Input	—	A+C signal input terminal.	
8	FIN2	Input	—	B+D signal input terminal.	
9	TIN1	Input	—	E signal input terminal.	
10	TIN2	Input	—	F signal input terminal.	
11	VREF	Output	RFVDD/2	VREF voltage output terminal.	
12	REF1	Input	—	Reference supply setting terminal.	
13*	FE	Output	ZHI	FE signal monitor terminal.	
14	TEC	Output	—	LPF capacitor connection terminal for TE signal.	
15	TE	Output	ZHI	TE signal monitor terminal.	
16*	RFMON	Output	ZHI	RF internal signal monitor terminal.	
17	JITTC	—	—	Capacitor connection terminal for jitter detection.	
18	ADAVDD	Input	—	Power terminal for servo A/D, D/A.	
19	ADAVSS	—	—	Earth terminal for serve A/D, D/A. To be connected to 0 V.	
20	TDO	Output	ADAVDD/2	Output terminal for tracking control. D/A output.	
21	FDO	Output	ADAVDD/2	Output terminal for focus control. D/A output.	
22	SPDO	Output	ADAVDD/2	Output terminal for spindle control. D/A output.	
23	SLDO	Output	ADAVDD/2	Output terminal for sled control. D/A output.	
24*	GPDAC	Output	ADAVDD/2	Servo D/A general-purpose output terminal.	
25	CONT4	Input/Output	Input Mode	General-purpose I/O terminal 4.	Controlled by commands from the microcomputer. When not used, set them as input terminals and connect to 0 V, or set them as output terminals and leave open.
26	CONT5	Input/Output	Input Mode	General-purpose I/O terminal 5.	
27*	SBCK/CONT6	Input/Output	Input Mode	General-purpose I/O terminal 6 or Subcode reading clock input terminal.	
28	SBCK/FG	Input	—	Subcode reading clock input terminal/FG signal input terminal/external emphasis setting terminal. Terminal functions are set by commands. When not used, connect to 0 V.	
29*	DEFECT	Output	L	Defect terminal.	
30*	V/*P	Output	H	Auto switching monitor output terminal for rough servo phase control. “H”: rough servo, “L”: phase servo.	
31*	FSEQ	Output	L	Sync signal detection output terminal. The status changes to “H” when the sync signal detected in EFM and the sync signal of internal generation are identified.	
32*	MONI1	Output	L	Internal signal monitor terminal 1.	
33*	MONI2	Output	L	Internal signal monitor terminal 2.	
34*	MONI3	Output	L	Internal signal monitor terminal 3.	
35*	MONI4	Output	L	Internal signal monitor terminal 4.	
36*	MONI5	Output	L	Internal signal monitor terminal 5.	
37	VSS	—	—	Digital system earth terminal. To be connected to 0 V.	
38	VDD	Input	—	Digital system power terminal.	
39*	DOUT	Output	L	Digital OUT output terminal. (EIAJ format)	
40	TEST	Input	L	Input terminal for test. To be connected to 0 V.	
41	LVDD	Input	—	Left channel D/A converter	Power supply for Left channel.
42	LCHO	Output	LVDD/2		Left channel output.
43	LVSS	—	—		GND for Left channel. Must be connected to 0 V.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

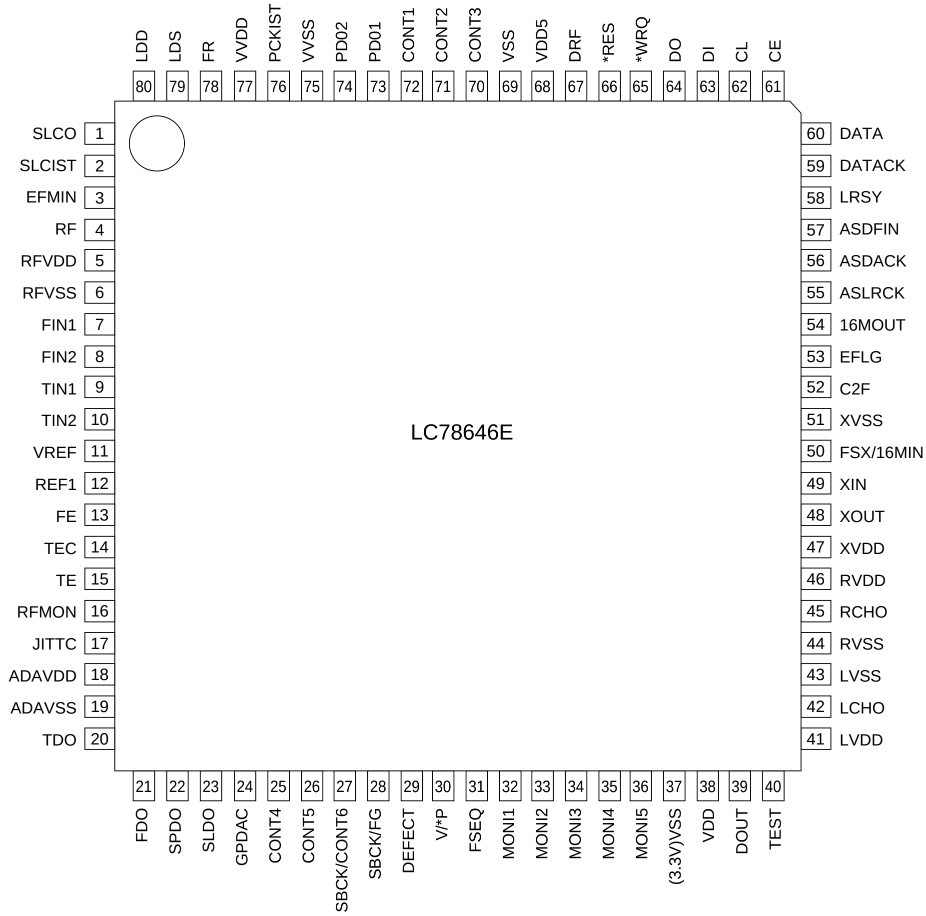
IC401 VHiLC78646E-1: Servo/Signal Control (LC78646E) (2/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
44	RVSS	—	—	Right channel D/A converter	GND for Right channel. Must be connected to 0 V.
45	RCHO	Output	LVDD /2		Right channel output.
46	RVDD	Input	—		Power supply for Right channel.
47	XVDD	Input	—	Crystal Oscillator	Power supply for crystal oscillator.
48	XOUT	Output	Oscillator		Connected for the 33.8688 MHz crystal oscillator ciement.
49	XIN	Input	Oscillator		
50	FSX/16MIN	Input/Output	Input	7.35 kHz Synchronization signal monitor port. or Clock input port for Digital filter & D/A	
51	XVSS	—	—	Crystal Oscillator	GND for crystal oscillator. Must be connected to 0 V.
52*	C2F	Output	H	C2 FLAG monitor port.	
53*	EFLG	Output	L	C1, C2 error corrected monitor port.	
54*	16MOUT	Output	Clock	16.9344 MHz output port.	
55	ASLRCK	Input	—	Anti-shock	Left/Right clock input port. (If this port does not use, must be connect to 0 V.)
56	ASDACK	Input	—		Bit clock input port. (If this port does not use, must be connect to 0 V.)
57	ASDFIN	Input	—		Left/Right channel data input port. (If this port does not use, must be connect to 0 V.)
58*	LRCK	Output	L	Digital data	Left/Right clock output port.
59*	BCK	Output	L		Bit clock output port.
60*	DATA	Output	L		Left/Right channel data output port.
61	CE	Input	—	Microcomputer Interface	Chip enable signal input port.
62	CL	Input	—		Data transfer clock input port.
63	DI	Input	—		Data input port.
64	DO	Output	(H)		Data output port. (N-ch. open drain output.)
65	*WRQ	Output	H		Interruption signal output.
66	*RES	Input	—	Chip reset signal input port. This port must be set LOW after first applied power on.	
67	DRF	Output	L	Focus detection output port.	
68	VDD5	Input	—	Power supply for Microprocessor.	
69	VSS	—	—	GND for digital circuit. Must be connected to 0 V.	
70	CONT3	Input/Output	Input	General purpose port 3.	Controlled with serial data command from micro-computer. When not used, General purpose input/output terminal. Set it as the input terminal and open it by connecting to 0 V, or set it as the output terminal and open it.
71	CONT2	Input/Output	Input	General purpose port 2.	
72*	CONT1	Input/Output	Input	General purpose port 1.	
73	PDO1	Output	—	PLL	Internal VCO control phase comparator output port 1.
74	PDO2	Output	Input		Internal VCO control phase comparator output port 2.
75	VVSS	—	—		GND for internal VCO. Must be connected to 0 V.
76	PCKIST	Input	—		PDO output current adjustment resistor connection port.
77	VVDD	Input	—		Power supply for internal VCO.
78	FR	Input	—		VCO frequency range adjustment port.
79	LDS	Input	—	LASER power detected signal input port.	
80	LDD	Output	—	LASER power control signal output port.	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Be sure to supply the same potential to each power terminal. (VVDD, ADAVDD, VDD, LVDD, RVDD, XVDD)
Terminal witch is controlled by the power terminal (VDD5 V) for a microcomputer interface :
CE (61 pin), CL (62 pin), DI (63 pin), DO (64 pin), WRQ (65 pin), RES (66 pin), DRF (67 pin)

IC401 VHiLC78646E-1: Servo/Signal Control (LC78646E)



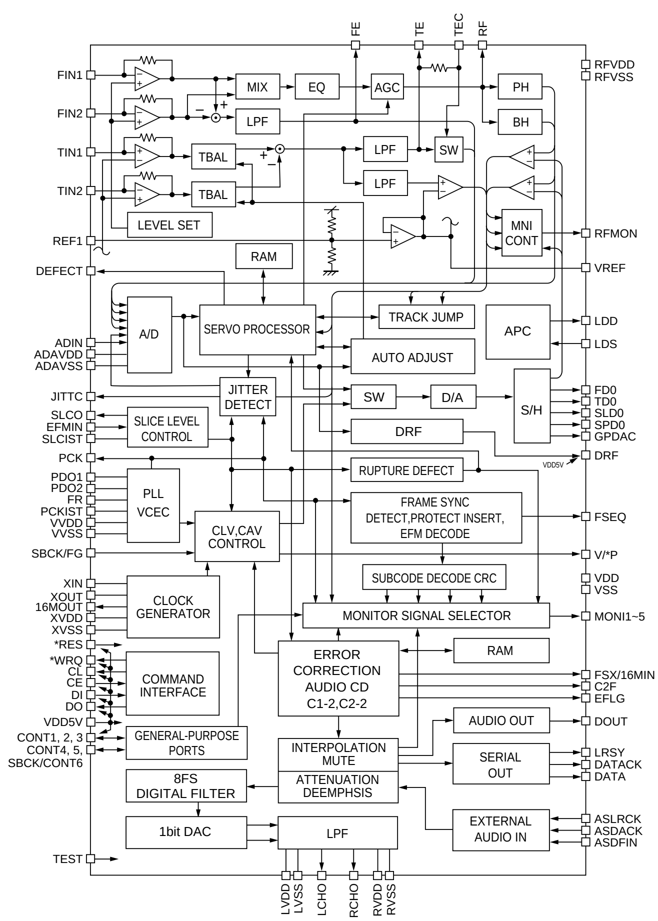


Figure 46 BLOCK DIAGRAM OF IC

IC601 VHiLC75341M-1: Audio Processor (LC75341M)

Pin No.	Terminal Name	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin. Data written into an internal latch in a timing of "H" to "L". Each analog switch is activated. Data transfer enabled at "H" level.
3	VSS	Ground pin.
4	LOUT	Bass band filter comprising capacitor and resistor connection pin and bass/treble output pin.
5	LBASS	Bass band filter comprisingcapacitor and resistor connection pin.
6	LTRE	Treble band filter comprising capacitor and resistor connection pin.
7	LIN	Volume + equaliser output pin
8	LSEL0	Input selector output pin.
9-12	L4-1	Input signal pin.
13-16	R1-4	Input signal pin.
17	RSEL0	Input selector output pin.
18	RIN	Volume + equaliser output pin
19	RTRE	Treble band filter comprising capacitor and resistor connection pin.
20	RBASS	Bass band filter comprisingcapacitor and resistor connection pin.
21	ROUT	Bass band filter comprising capacitor and resistor connection pin and bass/treble output pin.
22	VREF	0.5x VDD voltage generation block for analog ground. Capacitor of several 10µF to be connected between VREF and AWSS (VSS) as a countermeasure against power ripple.
23	VDD	Supply pin
24	CLK	Serial data and clock input pin for control.

IC601 VHiLC75341M-1: Audio Processor (LC75341M)

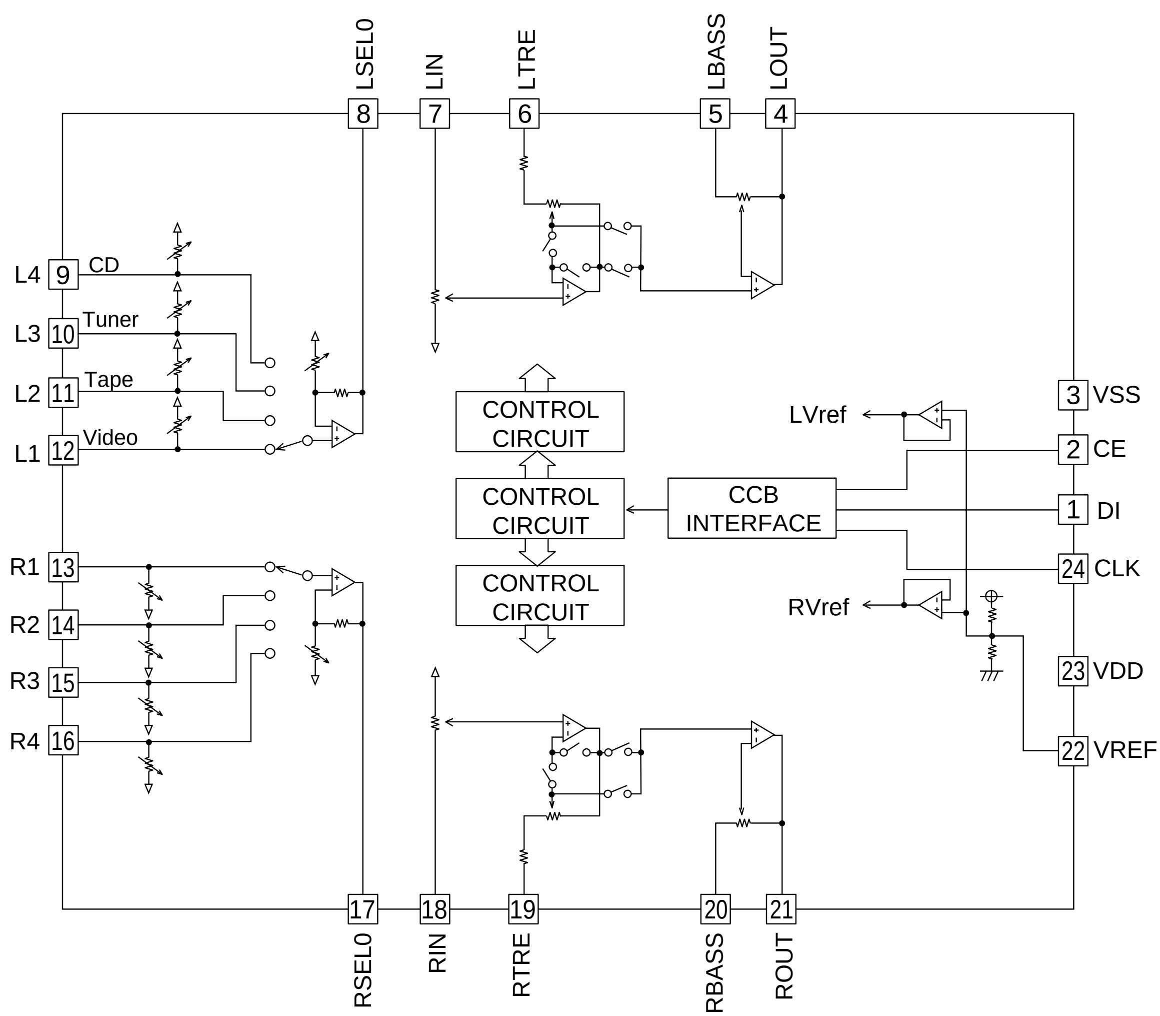


Figure 47 BLOCK DIAGRAM OF IC

IC701 RH-iX0058SJZZ: System Microcomputer (IX0058SJ) (1/2)

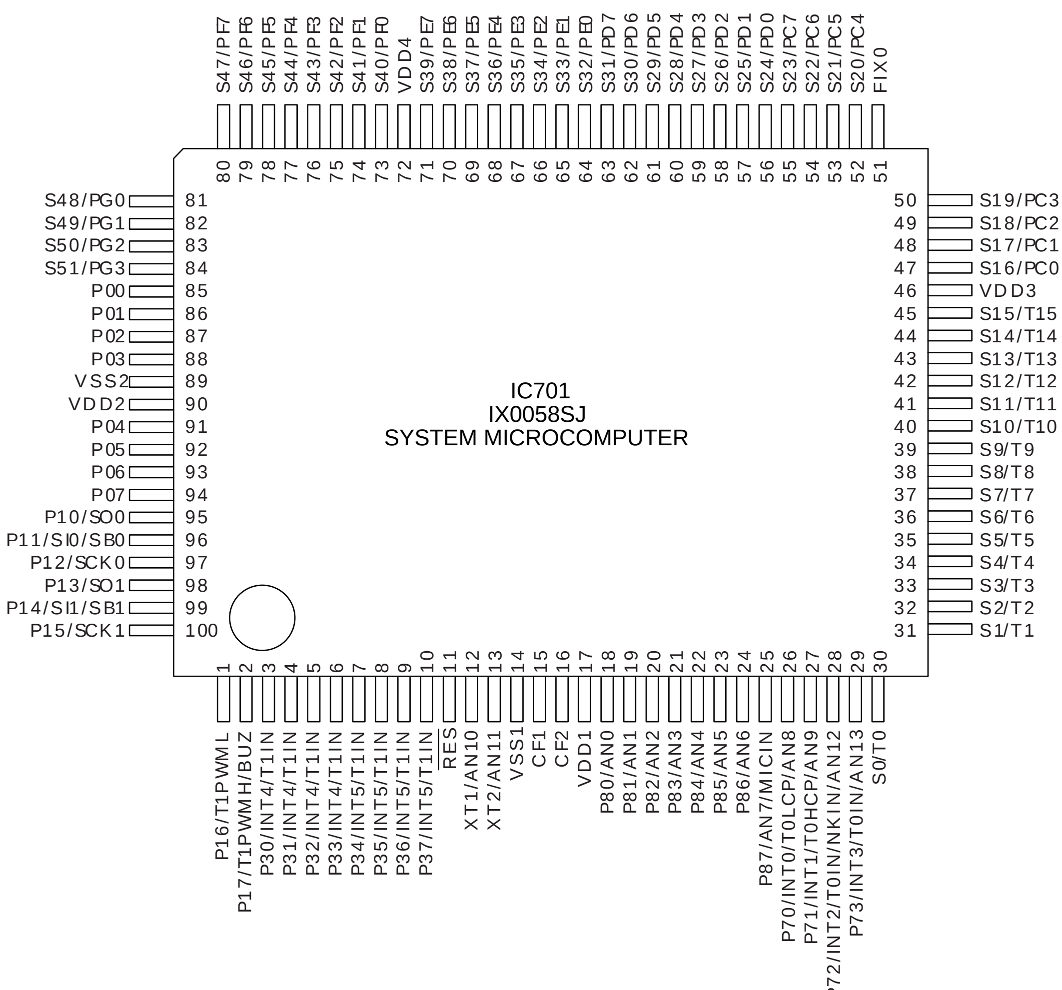
Pin No.	Port Name	Terminal Name	Input/Output	Function
1	P16	TIMER_LED	Output	Timer LED control.
2*	P17	RDS_DATA	Input/Output	Open
3*	P30	RDS_CLE	Input/Output	Open
4	P31	CD_CE	Output	CD DSP CE output.
5	P32	CD_RES	Output	CD DSP reset.
6	P33	CD_DRF	Input	CD DRF level detection.
7	P34	CD_WRQ	Input	CD write read request.
8*	P35	PROG0	Input/Output	Open
9*	P36	PROG1	Input/Output	Open
10*	P37	PROG2	Input/Output	Open
11	$\overline{RES}$	RESET IN PUT	Input	Reset signal input.
12*	XT1	XT1	Input	Open
13*	XT2	XT2	Input/Output	Open
14	VSS1	GND	–	Ground voltage.
15	CF1	CF1	Input	Main clock.
16	CF2	CF2	Output	Main clock.
17	VDD1	VDD1	–	(+) Power supply.
18	P80	KEY1_IN	Input	Key input.
19	P81	KEY2_IN	Input	Key input.
20*	P82	NO USE	Input/Output	Open
21	P83	FAN_PRT	Input	Fan protect circuit input.
22	P84	MODE_CKECK	Input	Ground level input.
23	P85	T2_TAPE2_SW	Input	Tape SW detection.
24*	P86	T1_TAPE1_SW	Input/Output	Open
25*	P87	RDS_VSM	Input/Output	Open
26	P70	SYS_STOP	Input	System stop input.
27	P71	X-BASS/DEMO	Input	Key input.
28	P72	POWER_KEY	Input	Key input.
29	P73	IRQ	Input	Remocon input.
30-38	S0/T0-S8/T8	G9-G1	Output	FL(VFD) segment driver.
39*-45*	S9/T9-S15/T15	NO USE	Input/Output	Open
46	VDD3	VDD3	–	(+) Power supply.
47-50	S16-S19	P1-P4	Output	FL(VFD) segment driver.
51	FIX0	GND	–	Connect to GND.
52-67	S20-S35	P5-P20	Output	FL(VFD) segment driver.
68	S36	DISC_NO_SW	Input	Tray disc no. SW detection.
69	S37	DISC1_SW	Input	Tray disc 1 SW detection.
70	S38	DISC_UP_SW	Input	Tray disc up SW detection.
71	S39	CLOSE_SW	Input	Tray close SW detection.
72	VDD4	VDD4	–	(+) Power supply.
73	S40	ROTATE	Output	Tray motor control.
74	S41	DISC_DOWN_SW	Input	Tray disc down SW detection.
75	S42	OPEN_SW	Input	Tray open SW detection.
76	S43	TAPE_BIAS	Output	Tape record bias.
77	S44	REC_PLAY	Output	Tape REC/PLAY change.
78	S45	REC	Input	Tape 2 rec SW detection.
79	S46	MOTOR	Output	Tape motor control.
80	S47	T1_SOL	Output	Tape 1 solenoid control.
81	S48	T2_SOL	Output	Tape 2 solenoid control.
82	S49	T1_RUN_PLUS	Input	Tape 1 RUN PULSE input.
83	S50	T2_RUN_PLUS	Input	Tape 2 RUN PULSE input.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0058SJZZ: System Microcomputer (IX0058SJ) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
84	S51	CH_SW	Output	Tape T1/T2 switch output.
85	P00	CD+B	Output	CD servo power supply circuit control output.
86*	P01	P_CON	Input/Output	Open
87*	P02	P_STB	Input/Output	Open
88	P03	P_MUTE	Output	Power mute output.
89	VSS2	GND	–	GND
90	VDD2	VDD2	–	(+) Power supply.
91	P04	SIGAL_LVL	Input	Power Amp. output level detection signal input.
92	P05	FAN_START	Output	Fan motor control.
93	P06	SP_DETECT	Output	Speaker output detect.
94	P07	SP_RELAY	Output	Speaker relay control.
95	P10	DI	Output	Data output.
96	P11	DO	Input	Data input.
97	P12	CL	Output	Clock output.
98	P13	CE	Output	CE output.
99	P14	FM_ST	Input	Radio stereo broadcast reception detection input.
100	P15	SD	Input	Broadcast reception status detection input.

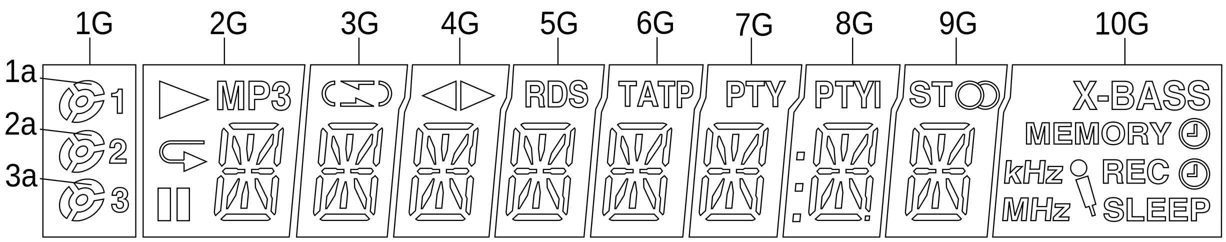
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

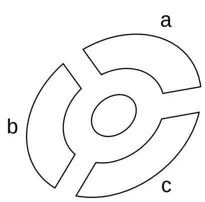


FL DISPLAY

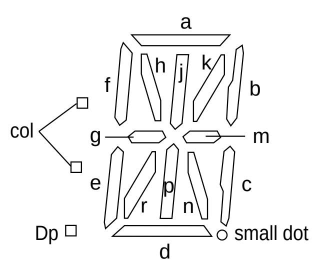
VFD701 VVK200906F/-1

GRID ASSIGNMENT





(1G)



(2G~9G)

ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G
P1	○ 1	MP3	(	▷	RDS	TA	PTY	PTYI	ST	(mic)
P2	1a	▷	)	◁		TP		col	○○	
P3	1b	▯▯	↯					Dp		◷ (white)
P4	1c	⊂→						small dot		◷(Rsh.o)
P5	○ 2	a	a	a	a	a	a	a	a	SLEEP
P6	2a	b	b	b	b	b	b	b	b	X-BASS
P7	2b	k	k	k	k	k	k	k	k	
P8	2c	j	j	j	j	j	j	j	j	
P9	○ 3	h	h	h	h	h	h	h	h	MEMORY
P10	3a	f	f	f	f	f	f	f	f	
P11	3b	m	m	m	m	m	m	m	m	
P12	3c	d	d	d	d	d	d	d	d	
P13		g	g	g	g	g	g	g	g	MHz
P14		p	p	p	p	p	p	p	p	
P15		e	e	e	e	e	e	e	e	kHz
P16		n	n	n	n	n	n	n	n	REC
P17		r	r	r	r	r	r	r	r	
P18		c	c	c	c	c	c	c	c	

SHARP PARTS GUIDE

MINI COMPONENT SYSTEM

MODEL CD-E500

CD-E500 Mini Component System consisting of CD-E500 (main unit) and CP-E500 (speaker system).

MODEL CD-E55

CD-E55 Mini Component System consisting of CD-E55 (main unit) and CP-E55 (speaker system).

MODEL CD-E44

CD-E44 Mini Component System consisting of CD-E44 (main unit) and CP-E44 (speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

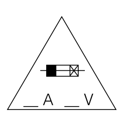
VCC .... Ceramic type
VCK .... Ceramic type
VCT .... Semiconductor type
VC • • MF .... Cylindrical type (without lead wire)
VC • • MN .... Cylindrical type (without lead wire)
VC • • TV .... Square type (without lead wire)
VC • • TQ .... Square type (without lead wire)
VC • • CY .... Square type (without lead wire)
VC • • CZ .... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD .... Carbon-film type
VRS .... Carbon-film type
VRN .... Metal-film type
VR • • MF .... Cylindrical type (without lead wire)
VR • • MN .... Cylindrical type (without lead wire)
VR • • TV .... Square type (without lead wire)
VR • • TQ .... Square type (without lead wire)
VR • • CY .... Square type (without lead wire)
VR • • CZ .... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.



CAUTION:FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE F901,902 5A, 125V/ F903 1.6A, 125V FUSE

ATTENTION:POUR ASSURER UNE LONGUE PROTECTION CONTRE UN INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DE TYPE F901,902 5A, 125V/ F903 1.6A, 125V FUSE

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

INTEGRATED CIRCUITS

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
IC101	VHISTK40207-1	J	AZ	Power Amp.,STK40207
IC201	VHIKIA7805API	J	AF	Voltage Regulator,KIA7805API
IC202	VHIKIA7812API	J		Voltage Regulator,KIA7812API
IC203	VHIKIA7808API	J	AF	Voltage Regulator,KIA7808API
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC401	VHILC78646E-1	J	AY	Servo/Signal Control,LC78646E
IC402	VHILA6548D/-1	J	AN	Focus/Tracking/Spin/Sled Driver, LA6548D
IC601	VHILC75341M-1	J	AM	Audio Processor,LC75341M
IC701	RH-IX0058SJZZ	J	BH	System Microcomputer, IX0058SJ
IC801	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K

TRANSISTORS

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
Q101~107	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q108	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q109	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q201	VSHSC1609GR-1	J	AC	Silicon,NPN,HSC1609 GR
Q202	VSSC1674-C/-1	J	AC	Silicon,NPN,SSC1674 C
Q203	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q204	VSKSA1015GR-1	J	AB	Silicon,PNP,KSA1015 GR
Q205	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q206	VSHSB562-C/-1	J	AC	Silicon,PNP,HSB562 C
Q207,208	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q302	VSSC1674-C/-1	J	AC	Silicon,NPN,SSC1674 C
Q306	VSSC1674-C/-1	J	AC	Silicon,NPN,SSC1674 C
Q351	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q360	VSKSA1015GR-1	J	AB	Silicon,PNP,KSA1015 GR
Q401	VSKSC3203Y/-1	J	AC	Silicon,NPN,KSC3203 Y
Q402	VSKSA1271Y/-1	J	AC	Silicon,PNP,KSA1271 Y
Q403,404	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q405	VSKSA1271Y/-1	J	AC	Silicon,PNP,KSA1271 Y
Q406	VSKSC3203Y/-1	J	AC	Silicon,NPN,KSC3203 Y
Q407	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q408	VSKSA1271Y/-1	J	AC	Silicon,PNP,KSA1271 Y
Q409	VSKSA1015GR-1	J	AB	Silicon,PNP,KSA1015 GR
Q411	VSHSB562-C/-1	J	AC	Silicon,PNP,HSB562 C
Q412	VSKSC3203Y/-1	J	AC	Silicon,NPN,KSC3203 Y
Q701	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q702	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q703,704	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q801	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q802	VSKSA1015GR-1	J	AB	Silicon,PNP,KSA1015 GR
Q803	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q804,805	VSHSB562-C/-1	J	AC	Silicon,PNP,HSB562 C
Q806	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q807,808	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q809	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q810,811	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q812~814	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q815	VSHSB562-C/-1	J	AC	Silicon,PNP,HSB562 C
Q816~818	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q819	VSKSC1815GR-1	J	AB	Silicon,NPN,KSC1815 GR
Q820	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q821	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q822	VSKSA1015GR-1	J	AB	Silicon,PNP,KSA1015 GR
Q823	VS2SC2001-K-1	J	AD	Silicon,NPN,2SC2001 K
Q901	VSKSA1015GR-1	J	AB	Silicon,PNP,KSA1015 GR

DIODES

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
D101~103	VHD1N4148//-1	J	AA	Silicon,1N4148
D104	VHD1N4004//-1	J	AB	Silicon,1N4004
D201~205	VHD1N4004//-1	J	AB	Silicon,1N4004
D207	VHD1N4004//-1	J	AB	Silicon,1N4004
D210	VHD1N4004//-1	J	AB	Silicon,1N4004
D301,302	VHD1N4148//-1	J	AA	Silicon,1N4148
D305~308	VHD1N4148//-1	J	AA	Silicon,1N4148
D401,402	VHD1N4004//-1	J	AB	Silicon,1N4004
D405	VHD1N4004//-1	J	AB	Silicon,1N4004
D604,605	VHD1N4148//-1	J	AA	Silicon,1N4148
D701	VHD1N4004//-1	J	AB	Silicon,1N4004
D702~705	VHD1N4148//-1	J	AA	Silicon,1N4148
D706	VHD1N4004//-1	J	AB	Silicon,1N4004
D801~805	VHD1N4148//-1	J	AA	Silicon,1N4148
⚠ D901~904	VHD1N6A2M++-1	J		Silicon,1N6A2M++
⚠ D905~908	VHD1N4004//-1	J	AB	Silicon,1N4004
D909~911	VHD1N4004//-1	J	AB	Silicon,1N4004
LED701	VHPSD3210W+-1	J	AC	LED,White,SD3210W+
VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
VD302,303	VHCKDV147B/-1	J	AH	Variable Capacitance,KDV147B
⚠ J213	VHHMZC950//-1	J		Thermistor
ZD201	VHEDZH05C2+-1	J	AB	Zener,5.1V,DZH05C2+
ZD351	VHEDZH05C2+-1	J	AB	Zener,5.1V,DZH05C2+
ZD401	VHEDZH03C3+-1	J	AB	Zener,3.3V,DZH03C3+
ZD402	VHEDZH06B2+-1	J		Zener,6.2V,DZH06B2+
ZD701	VHEDZH03C3+-1	J	AB	Zener,3.3V,DZH03C3+
ZD901	VHEDZH3001+-1	J	AB	Zener,30V,DZH3001+
ZD902	VHEDZH06C2+-1	J	AB	Zener,6.2V,DZH06B2+

FILTERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BF301	RFILR0008AWZZ	J	AE	Band Pass Filter
CF302,303	RFILF0004SJZZ	J	AG	FM IF,10.7 MHz
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0003SJZZ	J	AF	AM IF

TRANSFORMERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
T302	RCILA0007SJZZ	J	AG	AM Tracking
T304	RCILI0005SJZZ	J	AF	FM IF
T306	RCILB0009SJZZ	J	AG	AM OSC.
T351	RCILI0004SJZZ	J	AF	AM IF
⚠ T901	RTRNP0119SJZZ	J	BA	Power Transformer

COILS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
L103	VP-DH100K0000	J	AB	10 µH,Choke
L105	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L302	RCILR0003SJZZ	J	AD	FM RF
L303	RCILB0016SJZZ	J	AD	FM OSC.
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L353	VP-DH102K0000	J	AB	1 mH,Choke
L401~412	VP-DHR82K0000	J	AE	0.82 µH,Choke
L601	VP-DH2R2K0000	J	AB	2.2 µH,Peaking
L701~705	VP-DHR82K0000	J	AE	0.82 µH,Choke
L801	VP-MK331K0000	J	AB	330 µH,Choke

VARIABLE RESISTOR

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
VR351	RVR-M0026AWZZ	J	AC	10 kohm (B),Semi-VR [FM Mute Level]

VIBRATORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
X351	RCRM-0007SJZZ	J	AG	VCO,456 kHz
X352	RCRSP0003SJZZ	J	AL	Crystal,4.5 MHz
X401	RCRSP0002SJZZ	J	AL	Crystal,16.9344 MHz
X702	RCRSP0013SJZZ	J	AE	Crystal,8 MHz

CAPACITORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C101	RC-GZA336AF1C	J	AB	33 µF,16V,Electrolytic
C102	RC-GZA335AF1C	J	AB	3.3 µF,16V,Electrolytic
C103,104	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C105,106	VCKYPA1HB152K	J	AA	0.0015 µF,50V
C107,108	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C109,110	VCCCPA1HH3R0C	J	AA	3 pF (CH),50V
C111,112	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C113,114	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C115,116	RC-GZA107AF1H	J	AC	100 µF,50V,Electrolytic
C117,118	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C119,120	VCKYCY1HB221K	J	AA	220 pF,50V
C121	VCKYCY1HB102K	J	AA	0.001 µF,50V
C125~128	VCFYFA1HA104J	J	AC	0.1 µF,50V,Thin Film
C130	RC-GZA476AF1H	J	AB	47 µF,50V,Electrolytic
C133~136	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C145,146	VCKYPA1HB472K	J	AB	0.0047 µF,50V
C201	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C202	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C203	RC-GZW338AF1V	J	AH	3300 µF,35V,Electrolytic
C204	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C205	RC-GZA227AF1E	J	AB	220 µF,25V,Electrolytic

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
C206,207	RC-GZW478AF1H	J	AH	4700 µF,50V,Electrolytic
C208	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C209	RC-GZA477AF1C	J	AC	470 µF,16V,Electrolytic
C210	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C211	VCFYFA1HA473J	J	AB	0.047 µF,50V,Thin Film
C212	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C213	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C214	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C301	VCKYCY1EF123Z	J	AA	0.012 µF,25V
C302,303	VCKYCY1HB102K	J	AA	0.001 µF,50V
C304	VCKYCY1EF103Z	J	AA	0.01 µF,25V
C305	VCKYCY1HB472K	J	AA	0.0047 µF,50V
C306	VCCUCY1HJ9R0D	J	AB	9 pF (UJ),50V
C307	VCKYCY1HB472K	J	AA	0.0047 µF,50V
C308	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C309	VCKYCY1HB102K	J	AA	0.001 µF,50V
C311	VCCCPA1HH100J	J	AA	10 pF (CH),50V
C312	VCCSCY1HL330J	J	AD	33 pF,50V
C313	VCCUCY1HJ6R0D	J	AB	6 pF (UJ),50V
C314	VCCCCY1HH220J	J	AA	22 pF (CH),50V
C315	VCKYCY1HB101K	J	AB	100 pF,50V
C316	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C317	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C318	VCCSCY1HL5R0C	J	AD	5 pF,50V
C319	VCCCCY1HH180J	J	AA	18 pF (CH),50V
C320	VCKYCY1HB102K	J	AA	0.001 µF,50V
C321	VCKYCY1HB332K	J	AA	0.0033 µF,50V
C329	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C330	VCCCPA1HH120J	J	AA	12 pF (CH),50V
C331	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C332	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C334	VCCUPA1HJ270J	J	AA	27 pF (UJ),50V
C335	VCKYCY1HB561K	J	AA	560 pF,50V
C337	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C343,344	VCCSCY1HL330J	J	AD	33 pF,50V
C349	VCKYCY1HB102K	J	AA	0.001 µF,50V
C350,351	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C352	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C353,354	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C355	VCCSCY1HL220J	J	AD	22 pF,50V
C356	VCKYCY1HB102K	J	AA	0.001 µF,50V
C357	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C358	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C360,361	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C362	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C363	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C364	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C365	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C366	VCKYCY1HB102K	J	AA	0.001 µF,50V
C367,368	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C369	VCCSCY1HL560J	J	AD	56 pF,50V
C370~372	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX223K	J	AA	0.022 µF,16V
C378	VCKYPA1HB331K	J	AA	330 pF,50V
C380	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C381	VCCCCY1HH120J	J	AA	12 pF (CH),50V
C382	VCCCCY1HH150J	J	AA	15 pF (CH),50V
C383	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C384	VCKYCY1HB102K	J	AA	0.001 µF,50V
C385	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C386	VCKYPA1HB331K	J	AA	330 pF,50V
C387	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C391	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C392	VCKYCY1HB102K	J	AA	0.001 µF,50V
C393	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C394	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C395	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C396	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C397	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C398	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C399	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C401	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C402	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C403	VCKYCY1EF103Z	J	AA	0.01 µF,25V
C404	RC-GZA105AF1A	J	AB	1 µF,10V,Electrolytic
C405	RC-GZA337AF1A	J	AB	330 µF,10V,Electrolytic
C406	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C407	VCKYCY1EF103Z	J	AA	0.01 µF,25V
C408	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C409	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C410,411	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C412	VCKYCY1EF104Z	J	AA	0.1 µF,25V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C414	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C415	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C416	VCCSCY1HL101J	J	AA	100 pF,50V
C417	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C418	VCCSCY1HL470J	J	AA	47 pF,50V
C419	RC-GZA106AF1H	J	AB	10 µF,50V,Electrolytic
C420	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C421	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C422	VCKYCY1HB222K	J	AA	0.0022 µF,50V
C423	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C425	VCKYCY1HB222K	J	AA	0.0022 µF,50V
C426	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C427	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C428~432	VCCSCY1HL101J	J	AA	100 pF,50V
C433	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C434	VCKYCY1EF473Z	J	AB	0.047 µF,25V
C435	VCKYPA1HB104K	J	AC	0.1 µF,50V
C436	RC-EZD107AF1A	J	AB	100 µF,10V,Electrolytic
C437	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C438	RC-EZD106AF1H	J	AB	10 µF,50V,Electrolytic
C439	RC-EZD337AF0J	J	AC	330 µF,6.3V,Electrolytic
C440	VCKYCY1HB152K	J	AA	0.0015 µF,50V
C441	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C442,443	VCCCCY1HH100J	J	AA	10 pF (CH),50V
C444	VCKYCY1HB152K	J	AA	0.0015 µF,50V
C445	RC-EZD106AF1H	J	AB	10 µF,50V,Electrolytic
C447	VCKYPA1HF103Z	J	AB	0.01 µF,50V
C448	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C449	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C601~606	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C607,608	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic
C609,610	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C611,612	VCKYCY1HB272K	J	AA	0.0027 µF,50V
C613,614	RC-QZA104AFYJ	J	AC	0.1 µF,50V,Mylar
C615,616	RC-GZA225AF1C	J	AC	2.2 µF,16V,Electrolytic
C617	RC-GZA336AF1C	J	AB	33 µF,16V,Electrolytic
C618	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C619~621	VCKYPA1HB221K	J	AA	220 pF,50V
C622,623	VCKYPA1HB104K	J	AC	0.1 µF,50V
C624,625	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C701,702	VCKYCY1EB104K	J	AD	0.1 µF,25V
C705	VCKYPA1HB104K	J	AC	0.1 µF,50V
C706	RC-GZA227AF1A	J	AB	220 µF,10V,Electrolytic
C707	VCKYCY1EF104Z	J	AA	0.1 µF,25V
C708	VCKYCY1HB101K	J	AB	100 pF,50V
C709	RC-EZD107AF1A	J	AB	100 µF,10V,Electrolytic
C710	VCKYPA1HF473Z	J	AB	0.047 µF,50V
C711	VCKYCY1EB104K	J	AD	0.1 µF,25V
C712	RC-GZA336AF1C	J	AB	33 µF,16V,Electrolytic
C713	VCKYCY1HF103Z	J	AB	0.01 µF,50V
C716	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C717,718	VCCCCY1HH240J	J	AA	24 pF,50V
C801~804	VCKYCY1HB561K	J	AA	560 pF,50V
C805	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C806,807	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C808	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C809,810	VCCSPA1HL820J	J	AA	82 pF,50V
C812	VCKYCY1HB331K	J	AA	330 pF,50V
C814~816	VCKYCY1HB331K	J	AA	330 pF,50V
C817,818	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C819	VCKYCY1EF223Z	J	AB	0.022 µF,25V
C820	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C821,822	VCKYCY1HB561K	J	AA	560 pF,50V
C823,824	VCKYPA1HF333Z	J	AA	0.033 µF,50V
C825,826	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C827,828	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C829	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C830,831	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C832,833	VCKYPA1HB102K	J	AA	0.001 µF,50V
C834,835	RC-GZA226AF1H	J	AB	22 µF,50V,Electrolytic
C836,837	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C838,839	VCKYPA1HB332K	J	AA	0.0033 µF,50V
C840,841	RC-GZA476AF1E	J	AB	47 µF,25V,Electrolytic
C842	RC-GZA226AF1H	J	AB	22 µF,50V,Electrolytic
C843	RC-GZA227AF1C	J	AB	220 µF,16V,Electrolytic
C844	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C845	VCQPKA2AA222J	J	AA	0.0022 µF,100V,Polypropylene
C846	VCQYKA1HM273J	J	AB	0.027 µF,50V,Mylar
C847	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C849	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C850	RC-GZA337AF1C	J	AC	330 µF,16V,Electrolytic
C851	VCKYPA1HB472K	J	AB	0.0047 µF,50V

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
C901,902	RC-GZA107AF1H	J	AC	100 µF,50V,Electrolytic
C903~906	VCFYFA1HA104J	J	AC	0.1 µF,50V,Thin Film
C907	RC-GZV227AF1H	J	AC	220 µF,50V,Electrolytic
C908	RC-GZA476AF1H	J	AB	47 µF,50V,Electrolytic
C909	RC-GZV337AF1V	J	AB	330 µF,35V,Electrolytic
C910	RC-GZA107AF1H	J	AC	100 µF,50V,Electrolytic

RESISTORS

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
	VRS-CY1JB000J	J	AA	0 ohm,Jumper,0.8×1.55mm,Green
R101	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R105	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R106	VRD-ST2EE682J	J	AA	6.8 kohms,1/4W
R107,108	VRD-ST2CD393J	J	AA	39 kohms,1/6W
R109,110	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R111,112	VRD-ST2EE471J	J	AA	470 ohms,1/4W
R113,114	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R115,116	VRD-ST2CD563J	J	AA	56 kohms,1/6W
⚠ R117,118	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R119,120	VRS-VV3AAR20J	J	AB	0.2 ohms,1W
R121~124	VRD-ST2EE472J	J	AA	4.7 kohms,1/4W
R125,126	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R127	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R127A	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R128	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R128A	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R130	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R131	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R132	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R135,136	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R137,138	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
R201	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R202	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R203	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R204	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R205	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R206	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R207	VRD-ST2EE474J	J	AA	470 kohms,1/4W
R208	VRD-ST2EE183J	J	AA	18 kohms,1/4W
R209	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R210	VRD-RT2HD560J	J	AA	56 ohms,1/2W
R211	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R212	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R213	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R217	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R218	VRD-ST2CD561J	J	AA	560 ohms,1/6W
R219	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R221	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R301	VRD-ST2EE220J	J	AA	22 ohms,1/4W
R302	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R303	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R304	VRS-CY1JB473J	J	AA	47 kohms,1/16W
R305	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R306	VRS-CY1JB330J	J	AA	33 ohms,1/16W
R307	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R308	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R309	VRD-ST2EE471J	J	AA	470 ohms,1/4W
R310	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R312	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R313	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R314,315	VRS-CY1JB330J	J	AA	33 ohms,1/16W
R316	VRS-CY1JB331J	J	AA	330 ohms,1/16W
R323	VRS-CY1JB683J	J	AA	68 kohms,1/16W
R336	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R350	VRS-CY1JB272J	J	AA	2.7 kohms,1/16W
R351	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R352	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R353	VRS-CY1JB271J	J	AA	270 ohms,1/16W
R355	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R356	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R357	VRS-CY1JB474J	J	AA	470 kohms,1/16W
R358	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R359	VRS-CY1JB182J	J	AA	1.8 kohms,1/16W
R360	VRS-CY1JB472J	J	AA	4.7 kohms,1/16W
R361,362	VRS-CY1JB123J	J	AA	12 kohms,1/16W
R363	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R364	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R365	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R366	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R371~374	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R376	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R377	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R379	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R380	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R381	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R382	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R383	VRS-CY1JB562J	J	AA	5.6 kohms,1/16W
R384	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R385	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R386	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R391,392	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R393	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R395	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R401	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R402~405	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R406	VRS-CY1JB104J	J	AA	100 kohm,1/16W
R407	VRS-CY1JB152J	J	AA	1.5 kohms,1/16W
R408	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R409	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R410	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R411	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R412	VRS-CY1JB152J	J	AA	1.5 kohms,1/16W
R413	VRS-CY1JB332J	J	AA	3.3 kohms,1/16W
R414	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R415	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R416	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R417	VRS-CY1JB3R3J	J	AA	3.3 ohms,1/16W
R418	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R419	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R420	VRS-CY1JB331J	J	AA	330 ohms,1/16W
R421,422	VRS-CY1JB103J	J	AA	10 kohm,1/16W
R423	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R424	VRS-CY1JB122J	J	AA	1.2 kohms,1/16W
R425	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R426	VRS-CY1JB123J	J	AA	12 kohms,1/16W
R427,428	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R429,430	VRS-CY1JB681J	J	AA	680 ohms,1/16W
R431	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R434	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R435~439	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R440	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R441	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R442	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R443	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R446	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R447	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R448	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R449	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R451	VRS-CY1JB101J	J	AA	100 ohm,1/16W
R452	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R453	VRD-ST2EE680J	J	AA	68 ohms,1/4W
R601~609	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R612	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R613	VRS-CY1JB392J	J	AA	3.9 kohms,1/16W
R614,615	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R616~619	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R620,621	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R622,623	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R624,625	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R628,629	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R630	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R641,642	VRS-CY1JB223J	J	AA	22 kohms,1/16W
R643,644	VRS-CY1JB222J	J	AA	2.2 kohms,1/16W
R701~707	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R708	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R709	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R712~714	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R715	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R716~718	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R719	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R720~722	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R725	VRD-ST2CD271J	J	AA	270 ohms,1/6W
R726,727	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R728~732	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R733	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R734,735	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R736~739	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R742,743	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R744	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R744A	VRD-ST2CD473J	J	AA	47 kohms,1/6W

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
R745	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R746	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R747	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R749,750	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R751	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R752A	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752B	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752C	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752D	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752E	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752F	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752G	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752H	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752I	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752J	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752K	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752L	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752M	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752N	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752O	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752P	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752Q	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752R	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752S	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R752T	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753A	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753B	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753C	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753D	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753E	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753F	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753G	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753H	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R753I	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R754~759	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R760	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R761	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R762	VRS-CY1JB102J	J	AA	1 kohm,1/16W
R763	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R764	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R765	VRD-ST2CD753J	J	AA	75 kohms,1/6W
R766	VRS-CY1JB153J	J	AA	15 kohms,1/16W
R767	VRS-CY1JB822J	J	AA	8.2 kohms,1/16W
R768	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R769	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R770	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R771	VRD-ST2CD202J	J	AA	2 kohms,1/6W
R772	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R773,774	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R775	VRD-ST2CD820J	J	AA	82 ohms,1/6W
R776	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R777,778	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R779	VRD-ST2CD121J	J	AA	120 ohms,1/6W
R780	VRD-ST2CD753J	J	AA	75 kohms,1/6W
R781	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R782	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R783	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R784	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R785	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R786	VRD-ST2CD202J	J	AA	2 kohms,1/6W
R787	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R790	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R791	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R793,794	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R795~797	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R802,803	VRD-ST2CD271J	J	AA	270 ohms,1/6W
R804,805	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R806	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R807	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R809	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R810	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R811	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R812	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R813	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R815	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R816	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R817	VRD-ST2CD151J	J	AA	150 ohms,1/6W
R818	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R819	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R820,821	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R822,823	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R824~828	VRD-ST2CD103J	J	AA	10 kohm,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R829~832	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R833,834	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R835	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R836,837	VRS-CY1JB470J	J	AA	47 ohms,1/16W
R838,839	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R840,841	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R842,843	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R844,845	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R846	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R847	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R848,849	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R850	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R851	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R852,853	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R854,855	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R856	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R857,858	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R859	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R860	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R861,862	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R863	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R864	VRD-ST2CD183J	J	AA	18 kohms,1/6W
R865	VRS-CY1JB333J	J	AA	33 kohms,1/16W
R866	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R902	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R903	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R904	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R905	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R906,907	VRD-ST2CD331J	J	AA	330 ohms,1/6W

OTHER CIRCUITRY PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CN1	QCNWN0584SJZZ	J		Flat Wire,2Pin
CNP101	QCNCM050ESJZZ	J	AD	Plug,5Pin
CNP102	QCNCM999GAFZZ	J	AD	Plug,7Pin
CNP201	QCNCM998GAFZZ	J	AH	Plug,7Pin
CNP202	QCNCM059GSJZZ	J	AB	Plug,7Pin
CNP203	QCNCM046CSJZZ	J	AD	Plug,3Pin
CNP204	QCNCM999FAFZZ	J	AE	Plug,6Pin
CNP205	QCNCM999CAFZZ	J	AG	Plug,3Pin
CNP301	QCNCM042CSJZZ	J	AB	Plug,3Pin
CNP401	QCNCW014RSJZZ	J		Socket,16Pin
CNP405	QCNCM004LAFZZ	J		Plug,11Pin
CNP406	QCNCM004CAFZZ	J	AB	Plug,3Pin
CNP601	QCNCM073CSJZZ	J	AB	Plug,3Pin
CNP801	QCNCM074CSJZZ	J	AB	Plug,3Pin
CNP802	QCNCM999GAFZZ	J	AD	Plug,7Pin
CNP803	QCNCM999KAFZZ	J	AD	Plug,10Pin
CNP901	QCNCM999EAFZZ	J	AG	Plug,5Pin
CNS203	QCNWN0529SJZZ	J		Connector Ass'y,3Pin
CNW101/CNS101	QCNWN0541SJZZ	J		Connector Ass'y,5/5Pin
CNW102/CNS102	QCNWN0523SJZZ	J		Connector Ass'y,8/7Pin
CNW201/CNS201	QCNWN0528SJZZ	J		Connector Ass'y,8/7Pin
CNW202/CNS202	QCNWN0524SJZZ	J		Connector Ass'y,8/7Pin
CNW204/CNS204	QCNWN0532SJZZ	J		Connector Ass'y,7/6Pin
CNW205/CNS205	QCNWN0583SJZZ	J		Connector Ass'y,3/3Pin
CNW402/CNS402	QCNWN0533SJZZ	J		Connector Ass'y,7/6Pin
CNW403/CNS403	QCNWN0534SJZZ	J		Connector Ass'y,6/5Pin
CNW404	QCNWN0536SJZZ	J		Connector Ass'y,2Pin
CNW405/CNS405	QCNWN0574SJZZ	J		Connector Ass'y,12/11Pin
CNW601/CNS601	QCNWN0530SJZZ	J		Connector Ass'y,3/3Pin
CNW801	QCNWN0543SJZZ	J		Connector Ass'y,3Pin
CNW802	QCNWN0542SJZZ	J		Connector Ass'y,7Pin
CNW803/CNS803	QCNWN0527SJZZ	J		Connector Ass'y,11/10Pin
CNW804/CNS804	QCNWN0544SJZZ	J		Connector Ass'y,7/7Pin
CNW805/CNS805	QCNWN0545SJZZ	J		Connector Ass'y,7/7Pin
CNW901/CNS901	QCNWN0522SJZZ	J		Connector Ass'y,6/5Pin
MR401	RCORF0018AWZZ	J	AG	Core
⚠ F901	QFS-D502BSJNI	J	AE	Fuse,5A/125V
⚠ F902	QFS-D502BSJNI	J	AE	Fuse,5A/125V
⚠ F903	QFS-D162BSJNI	J	AE	Fuse,1.6A/125V
FC401	QCNWN0531SJZZ	J		Flat Cable,16Pin
JK101	QJAKM0001SJZZ	J	AG	Jack,Headphone
M101(204-4)	RMOTV0409AFZZ	J	AL	Motor,Air Cooling Fan
M401(238-2)	9GD8301-PDJ01	J		Motor with Pulley [Up/Down/Loading]
M402(238-3)	9GD8301-PDJ02	J		Motor with Worm Pulley [Rotate]
M801(219-10)	9GD60020322	J		Motor with Pulley [Tape]
NM801	————		—	Motor with Gear [Sled] (Supplied at REF No.238-1)
NM802	————		—	Motor with Chassis [Spindle] (Supplied at REF No.238-1)

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
RLY101	RRLYD0014AWZZ	J	AK	Relay
RX701	VHLGP1UM271-1	J	AH	Remote Sensor,GP1UM271
SO101	QTANA9024SJZZ	J	AD	Terminal,Speaker
SO601	QSOCJ0003SJZZ	J	AG	Jack,Video/Aux In
⚠ SO901	QSOCA0214AWZZ	J	AD	Socket,AC Input
SOL801(219-5)	9GD19212118	J	AP	Solenoid Ass'y
SOL802(219-5)	9GD19212118	J	AP	Solenoid Ass'y
SW1	————		—	Switch,Leaf Type [Pickup in] (Supplied at REF No.238-1)
SW401	QSW-B0002SJZZ	J	AE	Switch,Leaf Type [Disc Up/Down]
SW402(238-4)	9GD8301-DKG02	J		Switch,Leaf Type [Open/Close]
SW403(238-5)	9GDM03-DKG01	J		Switch,Leaf Type [Disc No.]
SW404(238-6)	9GDM03-DKG01	J		Switch,Leaf Type [Disc 1]
SW701	QSW-K0002SJZZ	J	AC	Switch,Key Type [X-BASS/DEMO]
SW702	QSW-K0002SJZZ	J	AC	Switch,Key Type [POWER ON/STAND-BY]
SW703	QSW-K0002SJZZ	J	AC	Switch,Key Type [OPEN/CLOSE]
SW704	QSW-K0002SJZZ	J	AC	Switch,Key Type [DISK SKIP]
SW705	QSW-K0002SJZZ	J	AC	Switch,Key Type [VIDEO/AUX]
SW706	QSW-K0002SJZZ	J	AC	Switch,Key Type [TAPE]
SW707	QSW-K0002SJZZ	J	AC	Switch,Key Type [PRESET DOWN]
SW708	QSW-K0002SJZZ	J	AC	Switch,Key Type [PLAY/REPEAT]
SW709	QSW-K0002SJZZ	J	AC	Switch,Key Type [PRESET UP]
SW710	QSW-K0002SJZZ	J	AC	Switch,Key Type [STOP]
SW711	QSW-K0002SJZZ	J	AC	Switch,Key Type [MEMORY/SET]
SW712	QSW-K0002SJZZ	J	AC	Switch,Key Type [TUNING/TIME DOWN]
SW713	QSW-K0002SJZZ	J	AC	Switch,Key Type [TUNING/TIME UP]
SW714	QSW-K0002SJZZ	J	AC	Switch,Key Type [TIMER/SLEEP]
SW715	QSW-K0002SJZZ	J	AC	Switch,Key Type [CLOCK]
SW719	QSW-K0002SJZZ	J	AC	Switch,Key Type [EQUALIZER]
SW720	QSW-K0002SJZZ	J	AC	Switch,Key Type [VOLUME UP]
SW721	QSW-K0002SJZZ	J	AC	Switch,Key Type [VOLUME DOWN]
SW722	QSW-K0002SJZZ	J	AC	Switch,Key Type [TUNER (BAND)]
SW723	QSW-K0002SJZZ	J	AC	Switch,Key Type [CD]
SW724	QSW-K0002SJZZ	J	AC	Switch,Key Type [REC/PAUSE]
SW801(219-8)	9GD19211305	J		Switch,Leaf Type [Tape 2 Initialize]
SW802(219-8)	9GD19211305	J		Switch,Leaf Type [Tape 1 Initialize]
SW803(219-9)	9GD19211305	J		Switch,Leaf Type [Tape 2 Rec]
VFD701	VVK200906F/-1	J	AT	FL Display

CABINET PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
201	CPNLC1068SJ01	J	AV	Front Panel Ass'y [CD-E44]
201	CPNLC1068SJ03	J	AV	Front Panel Ass'y [CD-E55]
201	CPNLC1068SJ05	J	AV	Front Panel Ass'y [CD-E500]
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	CGERH0001SJ02	J		Gear,Damper Ass'y
201- 3	GDORF0030SJSA	J	AF	Holder,Cassette,Left
201- 4	GDORF0031SJSA	J	AF	Holder,Cassette,Right
201- 5	HDECQ0116SJSA	J		Panel,Amp [CD-E44]
201- 5	HDECQ0122SJSA	J	AF	Panel,Amp [CD-E500]
201- 5	HDECQ0123SJSA	J	AF	Panel,Amp [CD-E55]
201- 6	MSPRD0028SJFW	J	AB	Spring,Cassette Holder,Left
201- 7	MSPRD0029SJFJ	J	AD	Spring,Cassette Holder,Right
201- 8	PCUSG0017SJSA	J		Cushion,Leg
202	GITAS0010SJ01	J		Side Panel Ass'y,Left [CD-E44/55]
202	GITAS0010SJ02	J		Side Panel Ass'y,Left [CD-E500]
202- 1	————		—	Side Panel,Left (Not Replacement Item)
202- 2	PCUSG0017SJSA	J		Cushion,Leg
203	GITAS0011SJ01	J		Side Panel Ass'y,Right [CD-E44/55]
203	GITAS0011SJ02	J		Side Panel Ass'y,Right [CD-E500]
203- 1	————		—	Side Panel,Right (Not Replacement Item)
203- 2	PCUSG0017SJSA	J		Cushion,Leg
204	CFANP0001SJ03	J		Fan Motor Ass'y
204- 1	LANGK0055SJFW	J		Bracket,Fan Motor
204- 2	MSPRK0001SJFJ	J	AC	Spring,Ring
204- 3	NFANP0001SJSA	J	AG	Rotary,Fan
204- 4(M101)	RMOTV0409AFZZ	J	AL	Motor,Air Cooling Fan
205	GCAB-1002SJSA	J	AP	Top Cabinet [CD-E44/55]
205	GCAB-1002SJSB	J	AP	Top Cabinet [CD-E500]
206	GCOVA1030SJSA	J	AG	Cover,CD Tray
207	GCOVA1031SJSA	J	AF	Cover,Cassette,Left
208	GCOVA1032SJSA	J	AF	Cover,Cassette,Right
209	GCOVA1033SJSA	J	AD	Cover,Remote Sensor
210	GCOVA1034SJSA	J	AD	Cover,Timer LED
211	GITAR0061SJSA	J	AL	Rear Panel [CD-E44]
211	GITAR0068SJSA	J		Rear Panel [CD-E500 For U.S.A.]
211	GITAR0069SJSA	J	AL	Rear Panel [CD-E55 For U.S.A.]
211	GITAR0072SJSA	J		Rear Panel [CD-E55 For Canada]
211	GITAR0073SJSA	J		Rear Panel [CD-E500 For Canada]
212	HBDGA1005SJSA	J	AE	SHARP Badge
213	JKNBZ0083SJSA	J	AD	Button,Power [CD-E44/55]
213	JKNBZ0083SJSB	J	AD	Button,Power [CD-E500]
214	JKNBZ0085SJSA	J	AF	Button,Function [CD-E44/55]
214	JKNBZ0085SJSB	J	AF	Button,Function [CD-E500]
215	JKNBZ0086SJSA	J	AF	Button,Stop/Play [CD-E44/55]
215	JKNBZ0086SJSB	J	AF	Button,Stop/Play [CD-E300]
216	JKNBZ0087SJSA	J	AD	Button,X-BASS
217	JKNBZ0088SJSA	J	AF	Button,Volume [CD-E44/55]
217	JKNBZ0088SJSB	J	AF	Button,Volume [CD-E500]
218	JKNBZ0089SJSA	J	AE	Button,Operation [CD-E44/55]
218	JKNBZ0089SJSB	J	AE	Button,Operation [CD-E500]
219	KMECB0012SJZZ	J		Tape Mechanism Ass'y
219- 1	9GD18210721	J		Belt,FF/REW
219- 2	9GD19210945	J		Belt,Main,Tape 1
219- 3	9GD19210944	J		Belt,Main,Tape 2
219- 4	9GD192104309	J	AR	Pinch Roller Arm Ass'y
219- 5(SOL801,802)	9GD19212118	J	AP	Solenoid Ass'y
219- 6	9GD62261401	J		Head,Erase
219- 7	9GD620101111	J	AR	Head,Record/Playback
219- 8(SW801,802)	9GD19211305	J		Switch,Leaf Type [Initialize]
219- 9(SW803)	9GD19211304	J		Switch,Leaf Type [Rec]
219-10(M801)	9GD60020322	J		Motor with Pulley [Tape]
219-11(PWB-H1,2)	9GD192114325	J		Tape Mechanism PWB Ass'y
220	LANGK0056SJFW	J		Bracket,Main PWB
221	LANGK0059SJFW	J		Bracket,Cassette Lock Lever,Tape 1
222	LANGK0060SJFW	J		Bracket,Cassette Lock Lever,Tape 2
223	LANGK0065SJFW	J		Bracket,Terminal PWB
224	LANGK0066SJFW	J		Bracket,Power PWB
225	LCHSM0023SJFW	J		Shassis,Main
226	LHLDW1001SJZZ	J	AD	Nylon Band
227	LHLDZ1062SJSA	J		Holder,FL Display
228	LHLDZ1072SJSA	J		Bracket,Front Panel Top
229	MLEVP0010SJSA	J		Lock Lever,Cassette,Tape 1
230	MLEVP0011SJSA	J		Lock Lever,Cassette,Tape 2
231	MSPRD0008SJFJ	J	AB	Spring,Cassette Lock Lever,Tape 1
232	MSPRD0030SJFW	J	AD	Spring,Cassette Lock Lever,Tape 2
233	NBLTK0009SJZZ	J	AE	Belt [Rotate]
234	NBLTK0010SJZZ	J	AE	Belt [Up/Down Loading]
235	PRDAR0076SJFW	J		Heat Sink
236	PRDAR0087SJFW	J		Heat Sink
⚠ 237	QFSHD0001AWZZ	J	AB	Holder,Fuse
238	KMECZ0006SJZZ	J		CD Player Unit Ass'y
⚠ 238- 1	KRPLE0022SJM2	J		CD Mechanism Ass'y
238- 2(M401)	9GD8301-PDJ01	J		Motor with Pulley [Up/Down Loading]
238- 3(M402)	9GD8301-PDJ02	J		Motor with Pulley [Rotate]
238- 4(SW402)	9GD8301-DKG02	J		Switch,Leaf Type [Open/Close]
238- 5(SW403)	9GDM03-DKG01	J		Switch,Leaf Type [Disc No.]
238- 6(SW404)	9GDM03-DKG01	J		Switch,Leaf Type [Disc 1]
601	LX-BZ0007SJFD	J		Screw,Special
602	LX-JZ0001SJFD	J	AA	Screw,ø3×10mm
603	LX-JZ0002SJFD	J	AD	Screw,Special
604	XHBSD20P03000	J	AA	Screw,ø2×3mm
605	XHBSD20P05000	J	AA	Screw,ø2×5mm
606	XHBSD30P06000	J	AA	Screw,ø3×6mm
607	XHBSD30P08000	J	AA	Screw,ø3×8mm

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
608	XHBSF30P08000	J	AA	Screw,ø3×8mm
609	XHSSD30P08000	J	AA	Screw,ø3×8mm
610	XJBSD25P10000	J	AD	Screw,ø2.5×10mm
611	XJBSD30P08000	J	AA	Screw,ø3×8mm
612	XJBSD30P14000	J	AA	Screw,ø3×14mm
613	XJBSF25P05500	J		Screw,ø2.5×5.5mm
614	XJBSF30P10000	J	AA	Screw,ø3×10mm
615	XJBSF30P16000	J	AA	Screw,ø3×16mm

SPEAKER BOX PARTS

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
	B3CPCDE44U	J		Front Speaker Box Ass'y,L-CH/ R-CH [CD-E44]
	B3CPCDE500U	J		Front Speaker Box Ass'y,L-CH/ R-CH [CD-E500]
	B3CPCDE55U	J		Front Speaker Box Ass'y,L-CH/ R-CH [CD-E55]

PACKING PARTS (EXCEPT FOR U.S.A.)

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
	SPAKA0134SJZZ	J		Packing Add.,Left
	SPAKA0135SJZZ	J		Packing Add.,Right
	SPAKC0286SJZZ	J		Packing Case [CD-E55]
	SPAKC0287SJZZ	J		Packing Case [CD-E500]
	SSAKA0014SJZZ	J		Polyethylene Bag,Accessories
	SSAKH0021SJZZ	J	AD	Polyethylene Bag,Unit
	TLABR1298SJZZ	J		Label,Bar Code [CD-E55]
	TLABR1299SJZZ	J		Label,Bar Code [CD-E500]
	TLABS0046SJZZ	J	AB	Label,CUL [CD-E500/E55]
	TLABZ0106SJZZ	J		Label,Feature [Tape 1]
	TLABZ0111SJZZ	J		Label,Feature [Tape 2]

ACCESSORIES

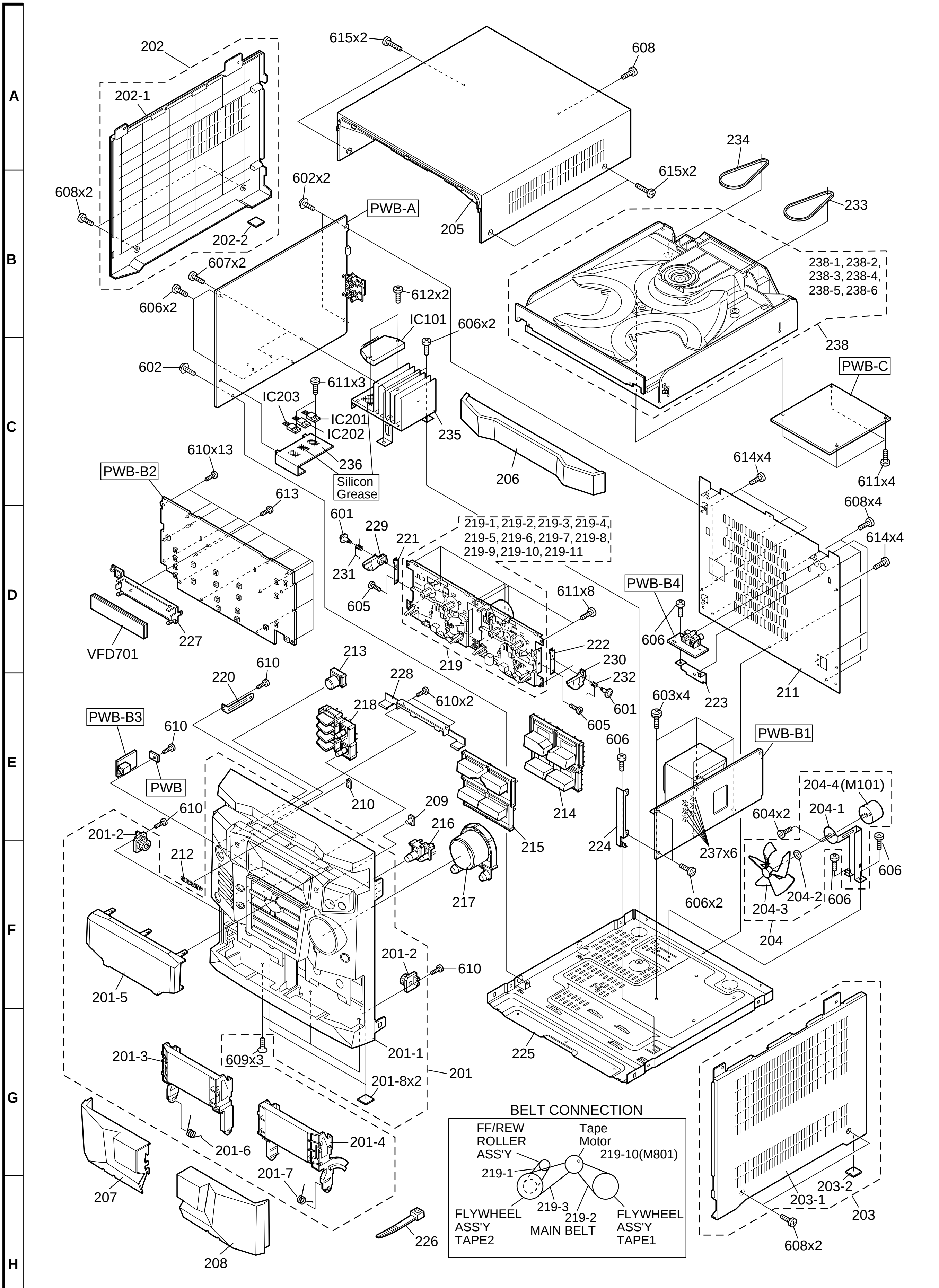
NO.	PART CODE	★	PRICE RANK	DESCRIPTION
⚠	QACCU0003SJ00	J	AH	AC Power Supply Cord
	QANTL0004SJZZ	J	AG	AM Loop/FM Antenna
	TINSE0118SJZZ	J	AE	Operation Manual [CD-E44]
	TINSE0123SJZZ	J	AE	Operation Manual [CD-E500/E55 For U.S.A.]
	TINSE0124SJZZ	J	AD	Quick Guide [CD-E44]
	TINSE0126SJZZ	J	AD	Quick Guide [CD-E500/E55 For U.S.A.]
	TINSZ0192SJZZ	J		Operation Manual [CD-E500/E55 For Canada]
	RRMCG0063SJSA	J	AP	Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
PWB-A	DCEKKV280SJ03	J	—	Main
⚠ PWB-B1~4	DCEKNV280SJ03	J	—	Power/Display/Headphones/ Terminal(Combined Ass'y)
PWB-C	DCEKSV280SJ03	J	—	CD Servo
PWB-F	————		—	T/T Motor (Supplied at REF No.238, Changer Unit)
PWB-G	————		—	Switch (Supplied at REF No.238, Changer Unit)
PWB-H1,2(219-11)	9GD192114325	J		Tape Mechanism

OTHER SERVICE PARTS

NO.	PART CODE	★	PRICE RANK	DESCRIPTION
	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner



Note: Only the unit and consumable parts are supplied as parts supply for the Tape mechanism.

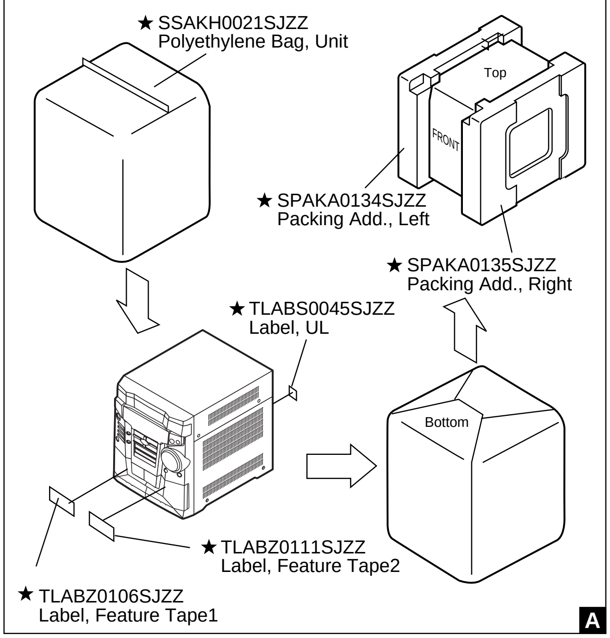
1	2	3	4	5	6

Figure 7 CABINET EXPLODED VIEW

PACKING OF THE SET (FOR U.S.A. ONLY)

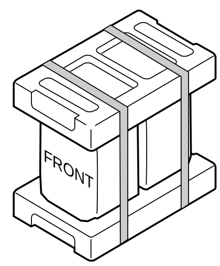
Setting position of switches and knobs	
Tape Mechanism	STOP

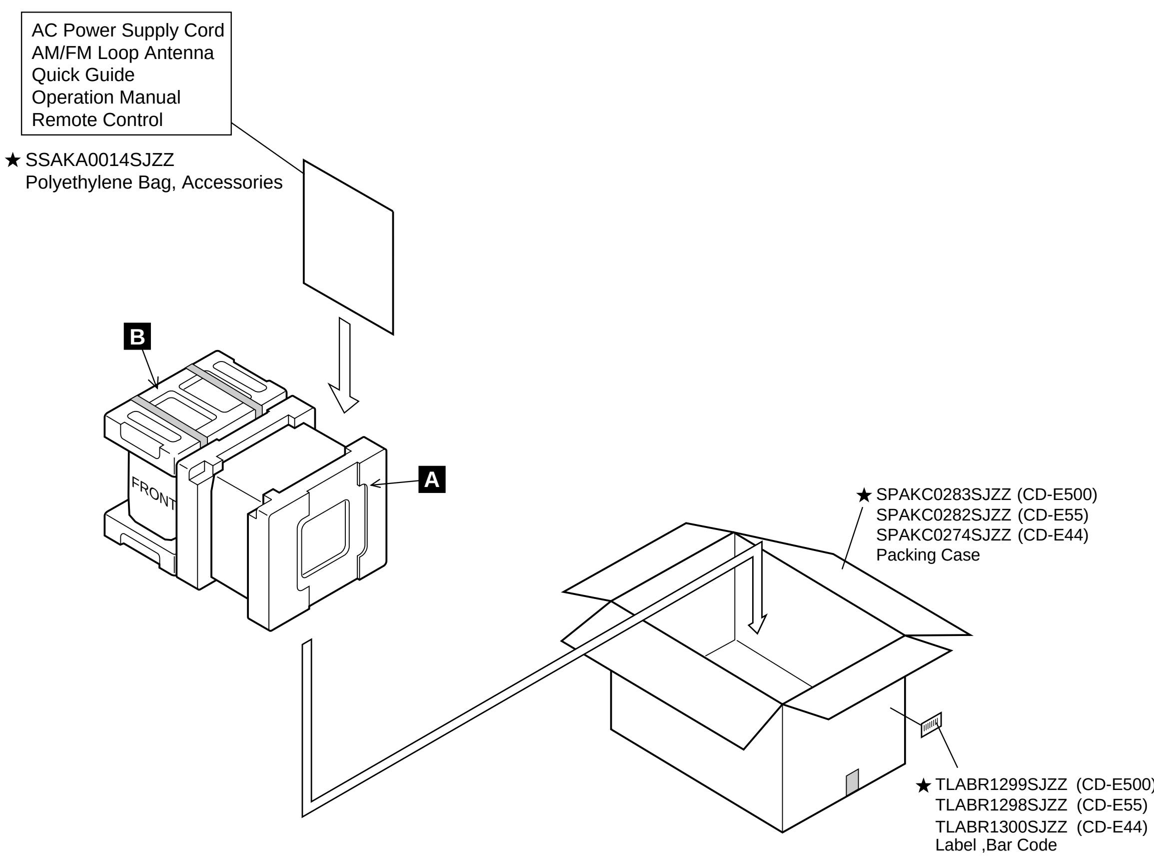
UNIT



Front Speakers Ass'y (L/R)

B3CPCDE500U (CD-E500)
B3CPCDE55U (CD-E55)
B3CPCDE44U (CD-E44)





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